

FOURTH  
BIENNIAL REPORT  
OF THE  
STATE  
ROAD DEPARTMENT  
OF THE  
STATE OF FLORIDA

FOR THE PERIOD BEGINNING

JANUARY 1, 1921

AND ENDING

DECEMBER 31, 1922



TALLAHASSEE, FLORIDA

T. J. APPELYARD, PRINTER, TALLAHASSEE, FLORIDA



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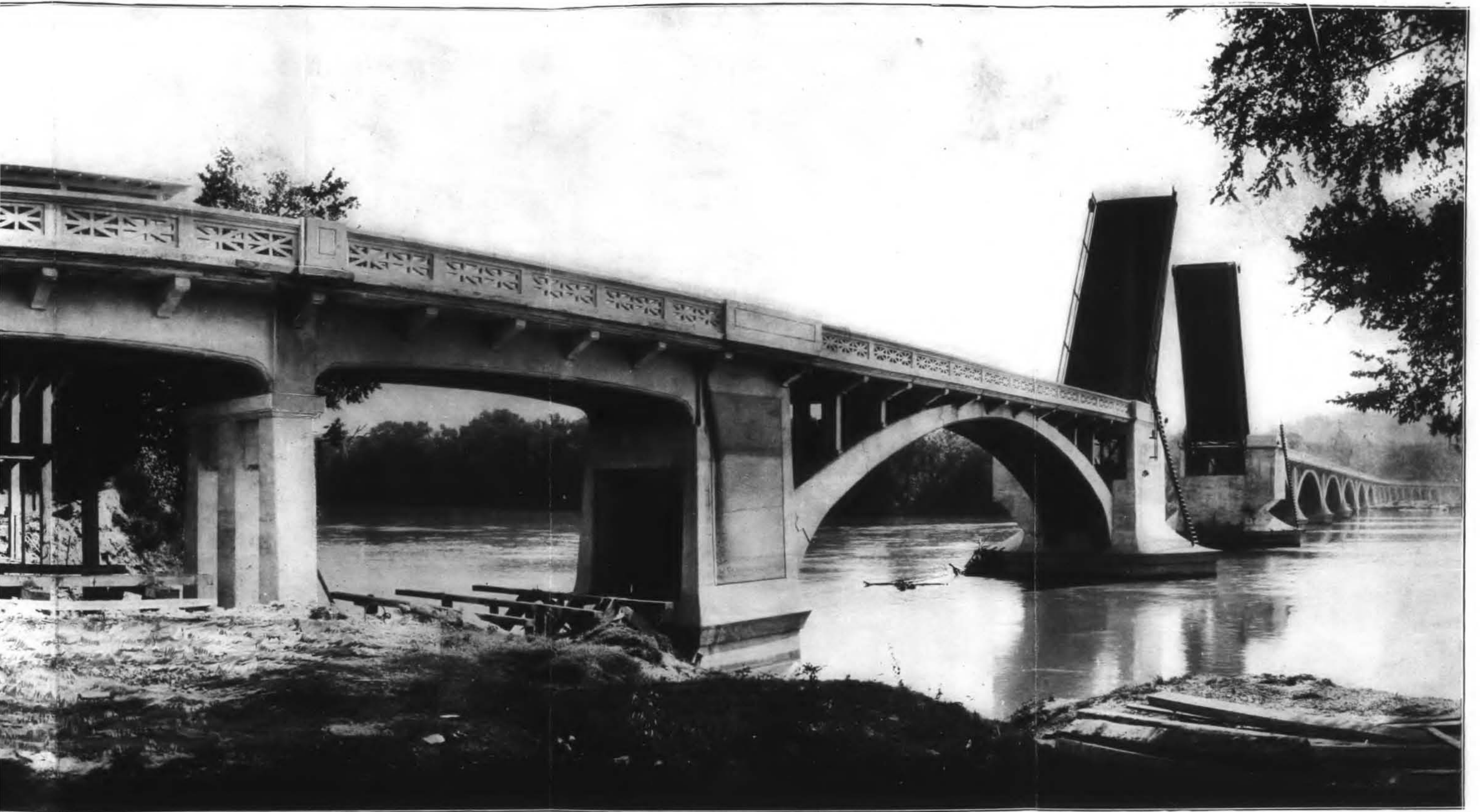


VICTORY BRIDGE









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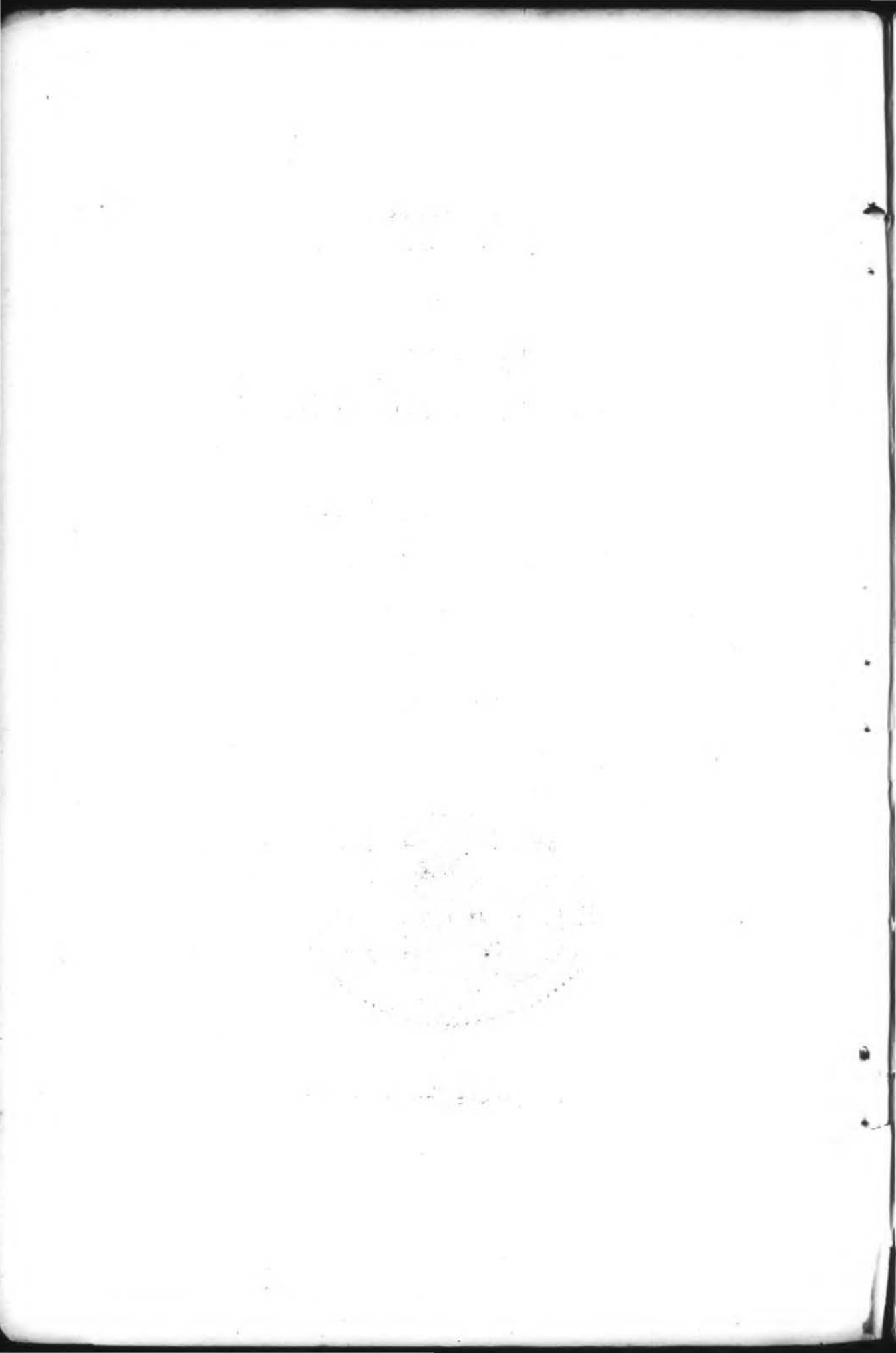
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## FOREWORD

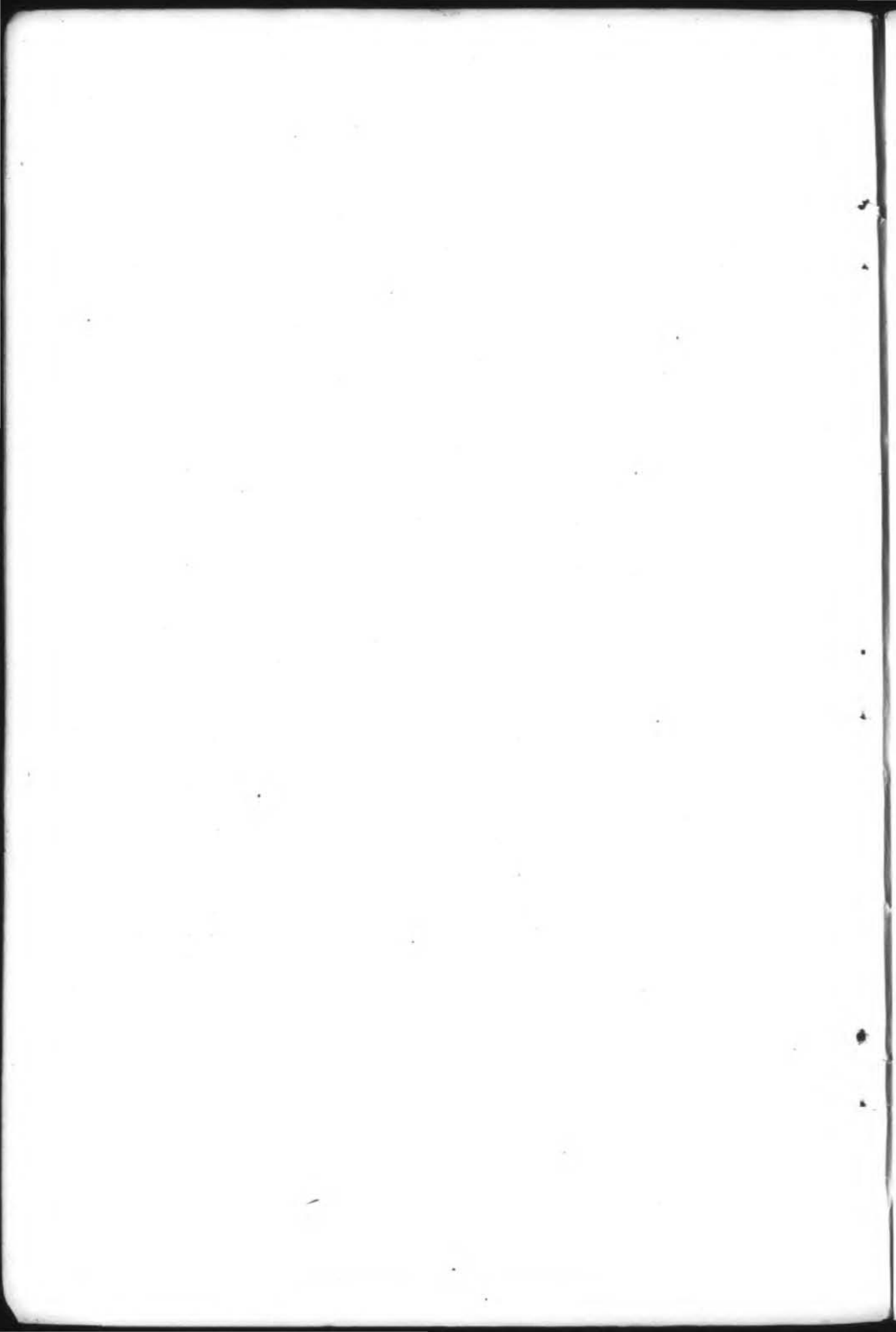
This report is predicated on the belief that the people whose money goes into the construction and maintenance of roads have a perfect right to know and understand just how this money is spent and the results obtained in the expenditure of same.

Many of the states are publishing monthly bulletins giving detailed information as to expenditures, progress of work, et cetera. However, on account of its limited office force, the State Road Department has heretofore been unable to undertake this very important work of keeping the people of the State periodically informed of its activities. It is therefore hoped that this report will give a clear and comprehensive idea of the accomplishments of the Department during the past two years and the proposed development of the work in the future.

If Florida is to hold her position as the most progressive of the Southern States, the work already accomplished must be considered as only a fore-runner or beginning of what must be planned and put into effect in the way of financial provision for increase of the annual mileage of completed highways which will connect the important points of the State with the trunk highway system of the North and West.

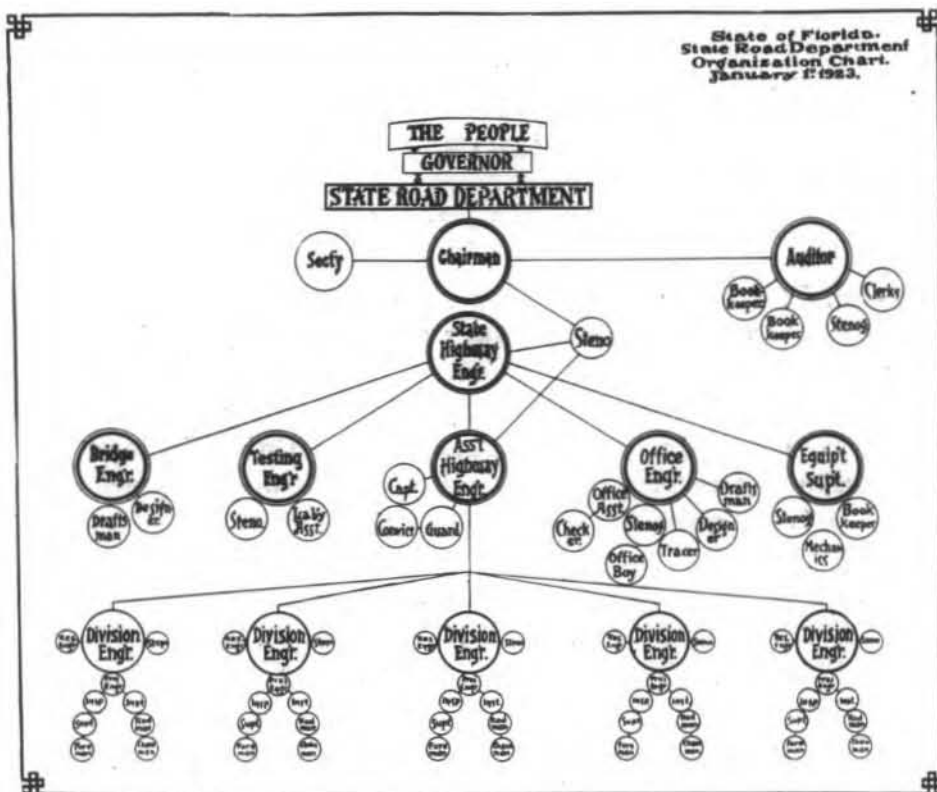
Special attention is called to the outline, given in this report of the functions of the several divisions of the Department and the proposed plans for the greater efficiency of same.







# ORGANIZATION CHART





## PERSONNEL OF DEPARTMENT

H. B. PHILIPS, *Chairman*

W. J. HILLMAN

I. E. SCHILLING

E. P. GREEN

W. M. CORRY

ELLA CREARY THOMPSON, *Secretary*

## PERSONNEL OF EMPLOYEES IN GENERAL CHARGE OF THE WORK OF THE DEPARTMENT

### *Engineering Division*

Wm. F. Cocks.....	State Highway Engineer
J. L. Cresap.....	Ass't State Highway Engineer
G. L. Derrick.....	Bridge Engineer
Harvey A. Hall.....	Testing Engineer
F. W. Berry, Jr. ....	Office Engineer
Joseph Peters.....	Supt. of Equipment
R. L. Bannerman.....	Div. Engr. 1st Division
L. K. Cannon .....	Div. Engr. 2nd Division
H. C. Green.....	Div. Engr. 3rd Division
L. B. Thrasher.....	Div. Engr. 4th Division
A. W. Kinney.....	Div. Engr. 5th Division

### *Accounting Division*

S. L. Walters.....	Auditor
Bettie V. Herring.....	Bookkeeper
J. M. Harris.....	Bookkeeper
J. H. Wentworth.....	Bookkeeper
C. J. Camp.....	Bookkeeper



## LETTER OF TRANSMITTAL

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*To the Governor of Florida and the  
Legislature of the State of Florida:*

In accordance with Section 8, Chapter 7900, Laws of Florida, Acts of 1919, and all amendments thereto, creating and outlining the duties of the State Road Department, I herewith submit the Biennial Report of said Department, covering the period from January 1st, 1921, to December 31st, 1922.

The accompanying reports of the State Highway Engineer and Auditor, together with the charts and tables, show the details of the work of the Department for the two year period embraced in this Report.

As to the general policy of the Department, it is to be noted that at the commencement of the two year period, many projects had been located and were in course of construction. These projects embrace so much mileage and involve such a large construction cost that very nearly all the resources and activities of the Department for the past two years have been devoted to the completion of these projects. It follows, therefore, that the Department had little latitude in inaugurating a policy as to the location and planning of its work during this period.

It was not until January of the present year that the present Department was in position to begin the carrying out of any general policy as to its work in the field.

It is to be noted\* further, that at the beginning of the period covered by this Report there existed a rather serious state of chaos in the affairs of the Department, on account of conditions over which the members had no control.

It has been our policy to correct, as far as possible, this state of affairs and complete the organization of the engineering and accounting divisions of the Department, in such manner that our work might be carried on in the most efficient and economic manner possible.



How far we have succeeded along this line will be disclosed by the tables showing the present organization and the work accomplished.

In the inauguration of new work it has been our policy to confine our work, as near as possible, to the trunk line roads of the State. It has been our conviction that the State Road Department, being a State institution, spending money contributed by the whole State, it is our first duty to plan and build those roads which are of state-

wide interest and will best serve the people of the whole State.

As to our method or plan of construction, it is noted that we have adhered to the high standard adopted in the beginning of the construction work of the Department, it being our conviction that it is unwise to spend public money building roads of temporary value only. The policy of the Department is to build permanent roads and bridges.

We have inaugurated and kept up a system of maintenance of the roads constructed by us and it is to be hoped that provision will be made for extending this maintenance policy to other roads, and parts of roads, not under actual construction by the Department.

Respectfully submitted,

H. B. PHILIPS, Chairman,  
State Road Department.





Under side of slab of concrete bridge, and piling under same, showing a concrete breaking away from the corroded steel. This condition is caused from poor grade of concrete, and placing steel too close to surface. This bridge was not built by the State Road Department.





Temporary timber approach to Choctawhatchee river  
bridge, Federal Aid Project No. 20.



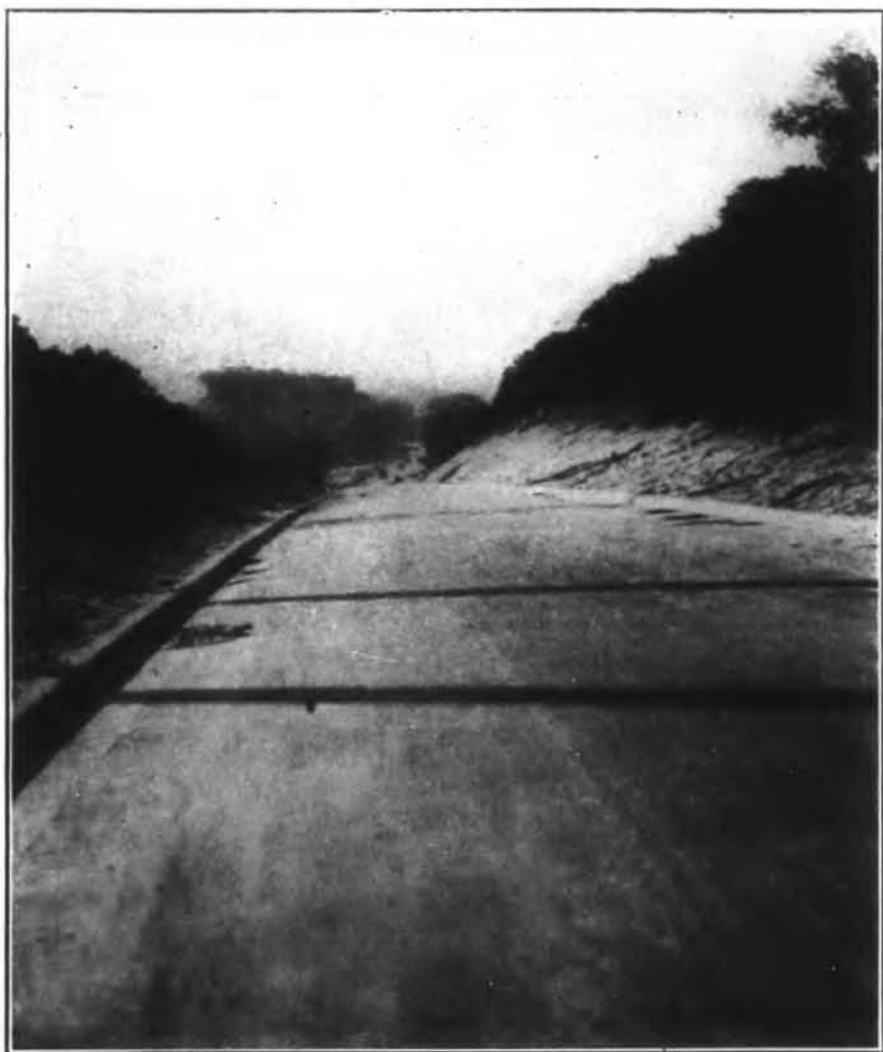
Convicts spreading marl on Road No. 2, in Charlotte  
County.





Project 13, Road No. 2, in Orange County. Sheet asphalt laid with binder course, on 8-inch Florida lime rock base.





Project 13, showing curb and gutter section.



## REPORT OF STATE HIGHWAY ENGINEER

*Hon. H. B. Philips, Chairman,  
Tallahassee, Florida.  
Dear Sir:*

I have the honor to submit to you the report of the State Highway Engineer for the two-year period from January 1st, 1921, to December 31st, 1922.

From January 1st, 1921, to January 21st, 1922, the position of State Highway Engineer was filled by my predecessor, Major Chas. A. Browne. During the interim from the date of Major Browne's resignation until I reported for duty on February 27th, 1922, the engineering work of the Department was in the hands of Mr. J. L. Cresap as Acting State Highway Engineer.

Attention is called to the accompanying organization chart showing the relative positions and functions of the several employees of the Engineering Division. This chart represents the organization as it now exists, since its partial reorganization during the past year.

A vacancy in the position of Bridge Engineer which occurred early in 1922 has been filled from within the Department. Likewise three vacancies in position of Division Engineer have been filled by the promotion of men already in its employ.

In connection with the vacancies referred to, attention is called to the fact that many of the counties are paying better salaries than the State Road Department, and the vacancies referred to were caused by the resignation of these division engineers to accept better paying county positions.

## SURVEYS

During the past two years from two to five survey parties have been kept constantly in the field. Surveys have



been made and plans prepared for 527.15 miles of road and ten large bridge structures.

Attention is called to the fact that a considerable mileage of both surveys and plans were undertaken and made at the request of counties, and same were to a large extent either modified or disregarded in the subsequent construction.

The average cost of finished locations has been approximately \$90.00 per mile and the cost of preparing plans, \$45.53 per mile, making the total cost of completed plans, inclusive of field work, \$135.53 per mile. In connection with the cost of the field surveys it is desired to call attention to the fact that the mileage given represents only the completed location; whereas, for every mile of location, from two to three miles of preliminary or trial line is run, which would bring the actual cost of all lines run down to approximately \$30.00 per mile.

The surveys made by the Department include cross-sections, soundings for foundations of all drainage structures other than box culverts, and the investigation of local materials.

The term "approximate" has been used in connection with the cost of field surveys on account of the fact that in some cases, where construction has followed closely upon the survey work, the cost of the actual survey was not clearly differentiated from the cost of the engineering supervision of the subsequent construction. This does not apply to work done since the present cost-keeping system has been put into effect.

In making locations for roads, especially those which will carry a heavy traffic, a great deal of attention is given to the elimination of railroad grade crossings. When the crossing cannot be eliminated altogether, either an overhead crossing or an underpass is, if possible, secured. It is an assured fact that the highway traffic of the future will not only increase immensely in volume and weight, but will also increase in speed, and the construction of to-



day must be so designed as to safeguard the lives of the thousands who will travel these roads after the builders of today have been forgotten. The saving of one life at a railroad crossing will justify the making of many miles of survey.

### STANDARD SPECIFICATIONS

During the past year Standard Specifications for road work have been prepared and printed. For some time prior to this work being done, typed or mimeographed loose-leaved specifications had been used, which had to be prepared and assembled for each separate project. This work involved much time and labor and also considerable risk of errors. These standard specifications have been approved by the Bureau of Public Roads for use on Federal projects.

Revised bridge specifications are now being prepared and will be printed as soon as approved by the Bureau of Public Roads.

### CONSTRUCTION

During the two-year period covered by this report, a total of 311.46 miles of road have been completed by, or under the supervision of the Department. The total expenditure for construction has been \$5,094,386.41, of which \$3,068,706.51 was State funds and \$1,333,274.22 was Federal aid. The balance, amounting to \$692,425.68, was contributed from county sources.

Of the 311.46 miles of road completed during this period, 24.78 miles were graded only, 105.30 miles were of sand-clay or some other type of semi-hard surface, and 181.38 miles were hard-surfaced with waterbound macadam, bituminous macadam, sheet asphalt and cement concrete .



In addition to the road mileage enumerated above, the following bridges have been completed, viz:

Victory bridge, over the Apalachicola River—reinforced concrete 2630 feet in length, inclusive of double leaf bascule lift span, with 18 foot width of roadway.

Blackwater River bridge—steel superstructure on reinforced concrete substructure, 370 feet in length, inclusive of double leaf bascule lift span, with 18 foot width of roadway.

Suwannee River bridge at White Springs—steel and reinforced concrete superstructure on reinforced concrete substructure, 325 feet in length, with 20 foot width of roadway.

Bullfrog Creek bridge No. 1 in Hillsborough County—reinforced concrete, 106 feet in length, with 20 foot width of roadway.

Alligator Creek bridge in Nassau County—reinforced concrete 135 feet in length, with 20 foot width of roadway.

There are also under construction, and largely nearing completion, the following bridges, viz:

Choctawatchee River bridge—steel superstructure with concrete substructure and creosoted timber approaches, totaling in length 2480 feet, 20 foot roadway.

Little St. Mary's River bridge—reinforced concrete 340 feet in length.

Alpaha River bridge—steel and reinforced concrete superstructure on concrete substructure 477 feet in length.

Seminole bridge in Pinellas County—reinforced concrete substructure and superstructure, 1550 feet in length.

Safety Harbor bridge in Pinellas County—reinforced concrete substructure and superstructure, 1150 feet in length.

Bullfrog Creek bridge No. 2 in Hillsborough County—reinforced concrete substructure and superstructure, 210 feet in length.



Little Manatee River bridge in Hillsborough County—three reinforced concrete arches, totaling 215 feet in length.

Further details as to type, period of construction, cost, etc., are to be found in the accompanying tables.

All construction work done by the Department during the past two years has been of a substantial nature. Where grading only has been done, the alignment has been carefully planned and the grades laid above highwater and suitable for hard surfacing as funds may become available. The standard width of roadbed is 30 feet, exclusive of side ditches and slopes. All drainage areas are carefully calculated and structures provided to meet the requirements of same, which drainage structures are to a large extent of a permanent nature.

Drainage ditches along the road are laid to proper grade and serve not only to drain the road but are designed so as to prevent water from ponding along the roadside. Where borrowpits are necessary they are cut true to grade and formed so as not to detract from the appearance of the road, and are also drained.

When the State Road Department first began the construction of roads it was thought that a nine-foot hard surface, with a three-foot semi-hard surface shoulder, would be sufficient, but only a few miles of this width pavement were constructed before it was found to be wholly inadequate to take care of the present travel.

The tremendous increase in the volume of travel has necessitated minimum widths of eighteen feet on primary, and sixteen feet on secondary roads. On many roads leading out of the larger cities, even these widths should be increased.

It has been the policy of the Department to make use of local materials in road construction wherever this could be done without lowering the quality of the work in hand. This effort has been largely directed toward the use of Florida rock in base courses, with the result that the major



part of the tonnage of materials entering into some of our highest class pavements has been produced within the State and delivered on the work with a minimum rail haul.

Lack of funds to complete certain projects has developed what may be termed "stage construction." This is, simply the building of the grade and drainage structures and laying the base course of Florida lime rock, or similar material with a temporary surface treatment, to carry traffic until funds may be available to lay the completed wearing surface. This expedient has enabled the Department to close several bad gaps; however, its general adoption is not recommended on account of the extremely high maintenance cost which will obtain pending the construction of the finished wearing surface.

Tests are made at the Department laboratory, located at the State University, Gainesville, of all materials used in construction work. However, in order to avoid delay, cements are tested at the mill by commercial chemists and delivered on the work with a certificate as to quality. These mill tests are checked in our laboratory from time to time.

The Testing Laboratory is one of the most important branches of the work of the Department, as uniformity of quality in materials is one of the first essentials to high standard construction. It has been found profitable to even test sand-clay materials, as so doing eliminates much guess work in securing proper mixtures.

Continuous rains throughout the Spring and Summer, followed in the late Summer and Fall by an embargo on open top cars, seriously hindered the construction program of 1922. However, the end of the year finds work resumed on all projects, with a fair prospect for open top car service during the ensuing months.

An important part of our road construction is the final cleaning up of the shoulders, ditches and slopes, and the planting of grass on the shoulders. After the grass has formed a compact sod it affords protection against wash,



which saves heavy maintenance costs and adds to the appearance of the highway.

Reference to the construction work of the Department would be incomplete without an acknowledgement of the cooperation of the Bureau of Public Roads. This cooperation has extended beyond the Federal aid projects actually under construction and has included inspections of the locations for State projects on the Seven Percent System in which the Bureau was not financially interested.

### MAINTENANCE

The close of this period finds the Department with 550 miles of highway under State maintenance. This mileage is made up of Federal aid projects and projects constructed by the Department with State or State and county funds. These sections of road are to a large extent isolated from one another and are, in most cases, individually too short to permit of the maintenance work being handled as economically as is desired. However, the work has, on the whole, been well performed and all sections of road under State maintenance are in creditable condition.

Federal aid is granted upon the condition that the States agree to properly maintain the several projects upon their completion. Therefore, it is important that adequate provision be made for maintenance if the State desires to secure future Federal aid.

Until recently no very definite plan or program of maintenance has been used by this Department, but for the coming year a complete outline of the work to be done has been made and a tabulated sheet showing the maintenance work to be done and the approximate cost of the same will be submitted to the Department at its next meeting, with the request that a budget system be adopted and the money with which to do this work be set aside. When approved, copies of the budget will be furnished to the



several division engineers, with the expectation that the maintenance forces will be reorganized accordingly.

It is suggested that the Department could perform no greater service to the State as a whole than in the maintenance of a system of state highways which would touch every county and insure uniform year-round maintenance for the trunk line and inter-county roads. The states of Wisconsin, Pennsylvania, Virginia, North Carolina and Georgia have each adopted a general maintenance policy covering their entire state highway system, including unimproved as well as improved roads. If such a policy were adopted and properly financed in this State the per mile cost of maintenance could be materially reduced under the present cost of maintaining more or less isolated sections.

### TRAFFIC REGULATIONS

As sections of improved road are from time to time connected with each other so as to cover considerable distance through more or less sparsely settled country, the question of traffic regulation becomes imperative. This need is two-fold; first, for the protection of the traveling public; secondly, for the protection of the road, itself.

The record of accidents during the past year, due to reckless driving, leaves no room for argument as to the first need for proper regulation of traffic. The second is not so generally recognized. However, it is manifestly wrong to permit one or two persons to injure or destroy a road by the operation of destructive vehicles and thus deprive thousands of the benefits to be derived from its use by normal and legitimate traffic.

The State Road Department, or some other State agency, should be given authority by the next Legislature to make and enforce reasonable traffic regulations. The experience of other states would indicate that it will be useless to depend upon the local authorities to enforce the laws in this





Preparing sub-grade on Federal Aid Project No. 32 with convict labor.



A good example of Bituminous Macadam. Part of Federal Aid Project 33, in Alachua County.





Loading Marl on Road No. 2 in Charlotte County



Flatwoods road of Southern Florida before being graded and drained.





Moving into Florida. Everything, including the cows, loaded on a truck.



Convict labor dressing shoulders to concrete pavement.





Applying asphalt to 16-foot Bituminous Macadam Road.



A Sand-Clay Road built by the State Road Department in Northern Florida.



respect, as the traffic of today is largely inter-county or statewide in its nature.

### STATE CONVICT ROAD FORCE

The State Convict Road Force is composed of all white and colored State prisoners who are physically able to perform the several duties incident to road construction, except the 35 able-bodied prisoners retained for use at the State Prison Farm. For the past two years this Force has been composed on an average of 226 white prisoners and 854 colored prisoners.

On the first day of January, 1921, the State Convict Road Force was divided into 20 camps, located in the following counties: Alachua, Baker, Bay, Calhoun, Columbia, DeSoto, Duval, Flagler, Gadsden, Hamilton, Hillsborough, Holmes, Jackson, Manatee, Nassau, Orange, Putnam and Volusia. Since that time, camps have been moved on account of work being completed and also on account of the establishment of additional camps, and work has been done in the following additional counties: Brevard, Charlotte, Highlands, Manatee, Marion, Osceola, Pasco and Suwannee.

The State Convict Road Force is housed, fed, clothed and guarded by and at the expense of the State Road Department. The average cost of maintaining this force for the past two years has been \$.85 per calendar day or \$1.19 per working day. However, during the latter part of 1922 this cost was reduced about twenty per cent under these figures.

This Convict Force is one of the most valuable assets of the State Road Department, as prison labor is far superior to the ordinary free labor obtainable and gives a force that can always be depended upon. The prisoners working under the direction of the State Road Department are well housed, well fed and well clothed and are always in fit condition to do a full day's work. During the years



1921 and 1922 the convicts worked 430,015.9 days, which, at the average rate of wages being paid free labor, would represent upwards of three quarters of a million dollars.

Convict labor is generally more profitable when employed on projects where local materials are available. However, there at the present time four convict forces employed in the construction of pavements where imported materials are being used. One force is employed in a rock quarry producing lime rock for shipment to different projects. One camp is also being used in connection with the Equipment Division at its new location near Gainesville. The prisoners in this camp are employed principally as helpers and in doing heavy work, however it is hoped that some of them may be developed into skilled mechanics.

Your attention is respectfully called to tables accompanying this report, which will show in detail the operation of the convict forces inclusive of the costs, locations, etc., of the various camps as they now exist.

### EQUIPMENT DIVISION

The headquarters of the Equipment Division, together with the storage warehouses and shops, were maintained at Yukon up to the end of the year 1922. However, as this location had been found unsatisfactory it was decided to move to a more central point. For this purpose, in August, 1922, the Department purchased fifteen acres of land lying one mile north of the City of Gainesville, adjacent to the Waldo Road and the Waldo branch of the Seaboard Air Line Railway. On this property warehouses and shops are being erected and it is expected that the move from Yukon to Gainesville will be completed early in the month of January.

The warehouses and shops at Gainesville will be constructed largely of materials secured from the Federal Government. A tower and fifty-thousand gallon water



tank have also been secured from the same source and will be used in installing a water system for fire protection.

The Equipment Division is under the supervision of a competent Superintendent, who is not only an experienced mechanic but also a good executive with considerable experience in handling all classes of machinery. The shop at Yukon was never fully equipped. However, the shop at Gainesville will be one of the most complete in the State. The equipment for this shop, worth many thousands of dollars, has all been received from the Federal Government and has cost the State only the loading and freight charges.

During June, 1921, fire destroyed a warehouse at Yukon, with a loss of repair parts and other supplies received from the Federal Government, inventoried at approximately \$200,000.00. However, experience of the writer in another state would lead to the opinion that only about one-fourth of these repair parts would have been adaptable to actual use in our work. The actual investment of State money in the supplies destroyed was between \$10,000.00 and \$15,000.00.

Up to the beginning of 1922 practically all of the serviceable equipment received from the Federal Government had been turned over to the several counties. This equipment consisted largely of trucks, tractors, shop equipment, etc. The U. S. Department of Agriculture values the surplus war material allotted to the State of Florida, to date, at \$2,126,165.00. Of this, at least fifty per cent has been turned over by the State Road Department to the several counties.

Heretofore the working forces of the Department have been poorly equipped. However, with the largely increased facilities of our shops, it is hoped to largely provide the necessary equipment from machinery and supplies which have been received from the Federal Government during the past few months. Some equipment will, no doubt, have to be purchased, but purchases will be held



to a minimum, as we expect to work over and convert a large amount of this old surplus war material into serviceable road-building equipment.

The supplies and equipment carried in stock by the Equipment Division, and also the equipment being operated on the several projects, have been inventoried and this inventory is being carried forward by a card system known as a "perpetual inventory." A complete bookkeeping system is also being installed, which will give cost data on all work done and supplies handled.

### GENERAL SUMMARY

While there is yet room for improvement in both organization and management, it is believed that both the field and office forces of the Department are better prepared for efficient work than ever before. The records will show that all branches of the work are more fully co-ordinated, with the result that plans for new work are being completed more promptly, equipment supplied with less delay and delivery on the work in better condition, and the unit cost of work reduced. Accurate cost data are now available for all work performed, from the making of survey to the completion of construction and the subsequent maintenance of the completed project.

Attention is called to the accompanying diagram showing the ratio of cost of administration and engineering to construction. While this ratio compares very favorably with other states, same can be materially improved as the volume of actual construction work is increased. In connection with the ratio of expenditure for engineering, as shown on the diagram above referred to, it is desired to call attention to the section of the law requiring the Department to provide, as far as possible, engineering assistance to the several counties when so requested. Under this provision, many survey have been made and working plans prepared for counties. This has added to the per-



centage of expenditure for engineering without any corresponding expenditure on the part of the State for construction, with a consequent increase in total ratio of cost for engineering above what would have been necessary for the actual engineering required in connection with the work of the Department.

Respectfully submitted,

WM. F. COCKE,

State Highway Engineer.

Tallahassee, Fla., January 8th, 1923.

### FEDERAL AID

The Federal Aid Road Act approved July 11, 1916, provided the first funds for systematic Federal co-operation in road construction. This act carried a total appropriation of \$75,000,000, to be available in five annual installments, beginning with \$5,000,000 for the year ending June 30th, 1917, and increasing by \$5,000,000 each year, the last installment for the year ending June 30th, 1921, being \$25,000,000.

This appropriation was annually distributed among the several states upon the following basis: one third on ratio of the population of each state, one third on the ratio of the area of each state and one third on the ratio of mileage of post roads in each state. This basis of distribution gave to some of the large undeveloped states a very substantial sum for the first year which increased by an equal amount each year for the five year period. See accompanying table of distribution for this and subsequent appropriations.

To secure participation in this Federal Aid the several states were required to meet two primary conditions: first to demonstrate to the Secretary of Agriculture that an adequate State highway department had been established and was being maintained; secondly, that financial pro-



vision had been made by the State to meet the Federal Aid with not less than an equal amount.

This Act provided that Federal aid could be expended only on roads over which the mails were, or would be carried and limited the amount of Federal aid to a maximum of \$10,000.00 per mile exclusive of bridges more than twenty feet in span. No limit was set on expenditures for bridges of more than twenty feet in span.

The Bureau of Public Roads was designated as the supervising agency of the Department of Agriculture and the several states were required to prepare plans and supervise construction, subject to the approval of the Secretary of Agriculture. All work was required to be of a substantial nature. However grading only and semi-hard surface were approved provided the alignment, grades and drainage structures were adequate and the state obligated itself to provide an adequate type of surface when in the judgement of the Secretary conditions required.

The states were also required to provide adequate maintenance for all Federal projects and failure to do so was sufficient reason for the Secretary to withhold further Federal aid to the State failing to meet this requirement.

War conditions, causing construction costs to advance to double and treble those obtaining at the time of the passage of this Act, induced Congress to make still more liberal provision for Federal participation in road construction and in February, 1919, \$200,000,000 was added to the original appropriation. The Act providing this additional appropriation also broadened the terms of its application so that practically any public road necessary to the development of a section became eligible for Federal aid. This Act further increased Federal participation to a maximum of \$20,000 per mile exclusive of bridges of more than twenty feet in span. For the distribution of this additional appropriation see table above referred to.

The largely increased mileage of Federal aid construction, made possible by this second appropriation, caused



many of the states to realize the need of a definite system of interstate highways on which to concentrate their efforts. Accordingly on November 9th, 1921, Congress passed what is known as the Federal Highway Act.

In addition to providing \$75,000,000 with which to carry on the Federal aid construction this Act limited the expenditure of Federal aid to projects located on what is termed the Federal seven per cent system. Under this latter provision each state has been required to submit for the approval of the Secretary of Agriculture a comprehensive system of trunk line highways which shall constitute not more than seven per cent of the total public road mileage of each respective state. As these state systems must be harmonized one with another so as to unite into a great National Highway System, the task of coordinating, prior to final approval, has been tedious. However, it would appear that the Florida seven per cent system, as submitted by the State Road Department of Florida, would be approved without alteration.

In 1916 the first membership of the State Road Department, laid out the present system of State highways. In 1922 this system of State Highways was found, with three minor exceptions, to meet all of the requirements of the Federal seven per cent system. It is also worthy of note that of 310 miles of Federal aid construction, covering a period of six years, only about twenty-one miles will be omitted from the seven per cent system. This is a far better record for foresight and breadth of vision than can be boasted by many of the other states and the retired members of the Department as well as those now in office should be given credit for same.

The Act of November 9th, 1921, also materially strengthened the maintenance requirements on Federal aid projects. Under this Act the Secretary of Agriculture may withdraw Federal aid for a state which does not within sixty days comply with the requirements in respect to maintenance. This Act also reduces Federal partici-



pation to a maximum of \$16,250 per mile exclusive of bridges more than twenty feet in span.

The scope of authority of the Secretary of Agriculture in the administration of the Federal aid is very broad. Under this authority the Bureau of Public Roads has carried on a very thorough investigation of highway problems with a view to co-ordinating the standards of construction in the several states, so that the resulting National System of Highways will adequately meet the traffic requirements of, not only the present, but also of the immediate future.

The type of construction required for the isolated Federal projects appears, in many instances, to be unnecessarily heavy to carry the traffic using the unimproved road of the present time. However, each of the isolated projects is planned to adequately meet the requirements of the traffic which will develop when they have been connected into a continuous line of improved road stretching across the State and meeting like continuous lines in neighboring states and so on across the continent. In short, the program upon which Federal aid is based, is too broad and far reaching for the average community to grasp until the subject has been given careful study.

In order to avoid the necessity of repeated relocation and reconstruction, on such parts of the seven per cent system as are improved without the use of Federal aid, it is advisable for the State or the counties to secure the cooperation of the Bureau of Public Roads in the selection of the location, laying of grade lines, etc. Where the standards of the Bureau are disregarded the resulting improvement will count for nothing toward the completion of the seven per cent system and the work will eventually be duplicated with consequent injury to property and unnecessary expense. It is therefore hoped that each and every community will make sure that the proposed alignment and grades, on sections of the seven per cent system to be improved without Federal aid, measure up to the





Florida Rock Base Course. Project 18, on Road No. 3, in Putnam County.



Concrete Bridge on Project 7, Road No. 2, in Hamilton County.





Penetration Macadam Road, built by State Road Department, in 1920.



Sand-Clay Surface Road No. 2, Hamilton County. This section of road has remained in good condition in all kinds of weather.





Federal Aid Projcet No. 33, on Road No. 2, in Alachua County. Three inches of Bituminous Macadam on an 8-inch Florida rock base.



Side view of bridge over Suwannee river, at White Springs.





Bridge over Suwannee river at White Springs, on Road No. 2. This bridge has been dedicated to the memory of Hon. Ed. Scott, first chairman of the State Road Department. Mrs. Scott and little daughter are standing in the foreground of the picture.



A First-Class Sand-Clay Surface. Federal Aid Project No. 7, Road 2, Hamilton County.



proper standards before allowing County or State funds to be expended thereon.

The distribution to the several states of surplus war materials, to be used in road construction and maintenance, has been placed under the supervision of the Secretary of Agriculture and the basis of distribution is the same as that of the Federal Aid.

The Act of Congress making available this surplus war material provides that same shall be turned over to the several State Highway Departments for the specific purpose of road work. So long as it is so used it is the property of the several State Highway Departments and can not be controlled by any other State governmental agency or further disposed of by State legislative action.

The State Road Department of Florida has loaned to the several counties somewhat more than half of all the serviceable equipment which it has received to date. This is entirely legitimate, however, same is subject to recall if improperly used by the counties or should same be required for the work of the Department.

The attached table gives the inventorial value of the surplus war materials allotted to the several state up to June 30th, 1922.



U. S. BUREAU OF PUBLIC ROADS.  
Summary of Appropriations to All the States.

Year	Law of 1916	Amendment 1919	Amendment 1921	Amendment 1922	Entire U. S.
1917 .....	\$ 5,000,000	\$ .....	\$ .....	\$ .....	\$ 5,000,000.00
1918 .....	10,000,000	.....	.....	.....	10,000,000.00
1919 .....	15,000,000	50,000,000	.....	.....	65,000,000.00
1920 .....	20,000,000	75,000,000	.....	.....	95,000,000.00
1921 .....	25,000,000	75,000,000	25,000,000	.....	125,000,000.00
1922 .....	.....	.....	50,000,000	.....	50,000,000.00
1923 .....	.....	.....	.....	50,000,000	50,000,000.00
Total.....	\$ 75,000,000	\$200,000,000	\$ 75,000,000	\$ 50,000,000	\$400,000,000.00

Summary of Appropriations to Florida.

Year	Law of 1916	Amendment 1919	Amendment 1921	Amendment 1922	Total
1917 .....	\$ 55,976.27	\$ .....	\$ .....	\$ .....	\$ 55,976.27
1918 .....	111,952.54	.....	.....	.....	111,952.54
1919 .....	170,723.88	573,797.20	.....	.....	744,521.08
1920 .....	229,518.88	860,695.79	.....	.....	1,090,214.67
1921 .....	286,861.98	860,585.94	.....	.....	1,147,447.92
1922 .....	.....	.....	886,825.69	.....	886,825.69
1923 .....	.....	.....	.....	591,217.13	591,217.13
Total.....	\$ 855,033.55	\$2,295,078.93	\$ 886,825.69	\$ 591,217.13	\$4,628,155.30



## RECORD OF FEDERAL AID PROJECTS TO DECEMBER 31st, 1922.

Proj. No.	Road No.	From	To	County	Length	Type	Project Statement Approved	Total Cost Estimated	Amount Requested	P. S. & E. Approved	Project Agreement Executed	Amount Granted	Miles Completed					Total Miles Completed	Date Completed	Total Cost	Reimbursement.
													1918	1919	1920	1921	1922				
1	1	Milligan	Holt	Ocala	10.45	Sand-Clay	10-15-17	\$ 34,083.28	\$ 17,041.64	4-25-18	4-25-18	\$ 16,938.10	10.45					10.45	12-31-18	33,962.84	16,938.10
2	2	Kissimmee	Laughman	Osceola	4.12	Brick	11-7-17	69,678.53	20,000.00	4-25-18	4-25-18	20,000.00	4.12					4.12	12-31-18	125,693.90	4,793.6
3	1	Apalachicola River Bridge		Jackson	0.19	Conc. Arch	1-9-18	417,031.12	208,515.56	3-31-19	3-31-19	208,515.56			.03	.06	.1	1.9	6-1-22	510,814.44	155,202.54
4	2	Arcadia	Sta. 62	DeSoto	5.03	Concrete	6-26-18	66,005.98	30,000.00	11-20-18	11-20-18	30,000.00	3.00	2.03				5.03	10-1-19	92,576.69	24,197.38
5	107	Arcadia	West	DeSoto	2.5	Concrete	7-9-18	46,879.17	20,000.00	11-2-18	11-2-18	20,000.00		2.5				2.5	10-6-19	50,431.49	15,855.84
6	1	Greenville	Aucilla River	Madison	5.6	Sand-Clay	9-18-18	25,829.23	12,914.61	3-18-19	2-18-19	12,914.61			3.0	.6		5.6	5-5-21	44,491.20	10,463.68
7A-B	2	Jasper	Jenings	Hamilton	13.047	Sand-Clay	11-23-18	279,448.84	139,724.42	2-18-20	6-30-21	139,724.42			2.0	6.0	4.0	12.0		197,919.83	30,373.91
		Alpha River Bridge		Conc. Arch																	
8	2	Alachua Co. Line	Burnett's Lake	Alachua	11.67	Bit. Mac.	10-22-18	217,155.38	108,577.69	1-24-20	5-12-20	108,577.69				11.67		11.67	12-31-21	251,359.42	96,268.32
9	1	Ponce de Leon	Argyle	Holmes	5.11	Sand-Clay	11-7-18	25,525.06	12,762.53	3-13-19	3-13-19	12,762.53		2.0	3.11			5.11	11-20-20	50,611.12	12,762.53
11	1	Baldwin—West to	Station 948	Baker, Nassau, Duval	15.4	Concrete	3-10-19	563,421.41	281,710.70	2-18-20	6-23-20	281,710.70					5.66	5.66		221,461.73	125,318.52
13	2	Plymouth	Mt. Dora	Orange	8.59	Bit. Mac.	5-12-19	305,686.15	152,843.07	10-23-20	6-23-21	152,843.07					8.59	8.59	12-25-22	278,431.41	124,204.85
14A-B	1	Sta. 22	Sta. 338, 80	Santa Rosa	6.41	Brick	5-5-19	284,174.26	142,087.13	2-10-20	5-12-20	142,087.13			5.0	1.0	.41	6.41	8-31-22	303,337.72	128,788.45
		Blackwater River Bridge		Conc. & Steel																	
15	2	Arcadia	Carlstrom Field	DeSoto	3.26	Concrete	5-26-19	54,570.67	20,000.00	4-25-19	8-1-19	20,000.00		3.26				3.26	8-25-19	70,356.13	16,962.16
16	107	Project 4	West	DeSoto	.67	Concrete	5-26-19	11,798.80	5,899.40	4-30-19	7-11-19	5,899.40		.67				.67	8-25-19	23,304.58	
17	5	Bullard's Creek	Hillsboro Co. Line	Manatee	7.87	Bit. Mac.	9-8-19	287,243.16	143,623.08	2-18-20	2-1-20	143,623.08					6.0	6.0		125,982.06	59,485.92
18	3	Sisco	Volusia Co. Line	Putnam	12.79	Bit. Mac.	9-20-19	454,730.74	227,365.37	2-18-20	4-18-22	227,365.37					11.0	11.0		225,390.97	99,680.57
19A	2	Suwannee	Genoa	Hamilton	8.17	Graded	9-20-19	98,409.90	49,204.95	8-18-20	6-30-21	49,204.95			2.0	4.0	2.17	8.17		48,764.17	37,285.52
19B	2	Swift Creek & Gully Bridges		Hamilton	.032	Concrete	9-20-19														
20	1	Choctawhatchee River Bridge		Holmes and Washington	.38	Concrete	1-13-20	420,842.37	210,421.18											135,558.15	
21A	1	Glenn St. Mary's	East Sta. 65	Baker	5.7	Concrete	1-15-20	234,656.07	117,328.03	2-18-20	6-25-20	117,328.03					3.1	3.1		129,755.73	30,012.69
21B	1	Little St. Mary's River Bridge		Concrete																	
22	1	Columbia Co. Line	Project 11	Baker	8.9	Concrete	1-15-20	284,984.50	142,492.25	2-18-20	6-25-20	142,492.25				4.45		4.45		40,398.85	26,943.76
23	1	End of Jax. Brick	Baldwin	Duval	12.8	Concrete	1-12-20	467,017.29	233,508.64	2-18-20	6-25-20	233,508.64					12.8	12.8	11-25-22	362,352.36	200,806.85
24	1	Lake City	Baker Co. Line	Columbia	9.89	Bit. Mac.	1-31-20	384,171.92	174,085.96	2-18-20	6-25-20	174,085.96					9.89	9.89	12-25-22	252,011.70	142,074.15
26	2	Lake City	Suwannee River	Columbia	11.01	Graded	11-5-20	77,747.78	38,873.89	1-18-21	6-30-21	38,873.89			2.0	3.0	5.0	10.0		71,002.95	28,446.00
27	2	Lake City	Proj. 505	Columbia	12.36	Bit. Mac.	10-21-22	469,110.40	234,555.20											309.24	
29A-B	5	Bullfrog Bridges 1 and 2		Hillsboro	.06	Concrete	8-23-21	148,680.79	74,340.39	6-20-21	12-22-21	74,340.39								112,598.32	36,881.41
30	2	Little Manatee River Bridge																			
30	2	Suwannee River Bridge		Columbia and Hamilton	.061	Concrete & Steel	9-28-20	57,748.27	28,874.13	6-30-21	8-19-21	28,874.13					.061	.061	11-25-22	61,241.35	
31	2	Genoa	Jasper	Hamilton	11.81	Graded	10-3-21	69,362.04	34,681.02	4-25-22	8-10-22	34,681.02					11.56	11.56		52,736.11	16,034.36
32	4	Duval Co. Line	5 Mi. North Callahan	Nassau	10.0	Bit. Mac.	6-20-21	369,717.21	184,858.60	11-13-22	11-22-22	184,858.60				5.0	3.0	8.0		108,033.45	14,579.17
33	2	Burnett's Lake	Gainesville	Alachua	12.6	Bit. Mac.	6-23-21	358,844.39	179,422.19	10-1-21	5-2-22	179,422.19					11.34	11.34		306,613.42	125,667.86
34	7	Pensacola	Roberts	Escambia	10.0	Concrete	4-28-22	391,120.94	195,560.97	11-3-22	11-29-22	195,560.97								110.52	
35	1	Pensacola	Nunez Ferry	Escambia	5.0	Concrete	7-31-22	214,920.13	100,000.00	12-12-22											
36	4	Vero	Wabasso	St. Lucie	7.76	Bit. Mac.	4-28-22	265,069.22	132,534.61	11-3-22	12-6-22	132,534.61								2,657.27	
37	2	Gainesville	Marion Co. Line	Alachua	14.4	Bit. Mac.	8-24-22	577,560.00	288,780.00											2,314.42	
38	1	Escambia Bay Bridge		Santa Rosa & Escambia	3.49	Concrete		462,233.74	231,116.87											8,383.98	
				Steel																	
39	4	Sebastian River Bridge		Brevard	.451	Concrete		148,332.80	74,166.40											888.61	
40	4	Volusia Co. Line	St. Lucie Co. Line	Brevard	40.0	Bit. Mac.		978,036.28	489,018.14											2,287.96	
41	4	Miami	Broward Co. Line	Dade	12.0	Bit. Mac.		452,184.00	226,092.00											932.39	
Total..					309.58			\$10,038,012.82	\$ 4,982,980.62			\$3,128,727.29	17.57	12.48	17.14	35.78	94.68	177.63		\$4,305,076.48	\$ 1,580,028.18



TOTAL ALLOCATION OF FEDERAL AID TO THE  
SEVERAL STATES

JUNE 30, 1923

STATE	Total Apportionment up to and Including the Fiscal Year 1923
Alabama .....	\$ 8,365,587.03
Arizona .....	5,526,820.76
Arkansas .....	6,710,166.47
California .....	12,487,852.12
Colorado .....	7,015,356.96
Connecticut .....	2,490,821.00
Delaware .....	1,057,029.83
Florida .....	4,628,155.30
Georgia .....	10,737,507.92
Idaho .....	4,924,616.66
Illinois .....	17,434,735.42
Indiana .....	10,680,051.63
Iowa .....	11,444,131.04
Kansas .....	11,399,111.59
Kentucky .....	7,732,029.26
Louisiana .....	5,404,173.97
Maine .....	3,804,563.99
Maryland .....	3,458,464.09
Massachusetts .....	5,879,525.16
Michigan .....	11,710,516.27
Minnesota .....	11,354,711.47
Mississippi .....	7,109,719.32
Missouri .....	13,402,290.08
Montana .....	8,076,970.34
Nebraska .....	8,502,077.49
Nevada .....	5,116,337.48
New Hampshire .....	1,752,463.99
New Jersey .....	4,836,750.60
New Mexico .....	6,372,833.51



New York .....	19,849,548.29
North Carolina .....	9,119,580.51
North Dakota .....	6,163,678.40
Ohio .....	14,907,954.46
Oklahoma .....	9,258,811.33
Oregon .....	6,303,284.76
Pennsylvania .....	18,297,567.57
Rhode Island .....	1,250,541.13
South Carolina .....	5,715,346.40
South Dakota .....	6,459,650.22
Tennessee .....	8,974,291.71
Texas .....	23,475,692.12
Utah .....	4,532,901.73
Vermont .....	1,851,478.73
Virginia .....	7,879,777.73
Washington .....	5,811,192.11
West Virginia .....	4,259,770.73
Wisconsin .....	10,162,307.10
Wyoming .....	4,936,254.22

#### DISTRIBUTION OF SURPLUS WAR MATERIAL

JUNE 30, 1922

STATE	Total Value of Material Delivered
Alabama .....	\$ 2,352,057
Arizona .....	2,436,823
Arkansas .....	2,376,257
California .....	4,463,012
Colorado .....	3,189,530
Connecticut .....	776,426
Delaware .....	419,263
Florida .....	2,126,165
Georgia .....	4,244,778
Idaho .....	1,563,328
Illinois .....	6,314,468



Indiana .....	5,067,439
Iowa .....	3,627,527
Kansas .....	3,819,984
Kentucky .....	2,415,469
Louisiana .....	2,001,044
Maine .....	1,129,080
Maryland .....	1,674,163
Massachusetts .....	1,286,304
Michigan .....	6,033,424
Minnesota .....	3,384,433
Mississippi .....	2,994,715
Missouri .....	4,448,381
Montana .....	2,291,787
Nebraska .....	3,210,623
Nevada .....	1,314,817
New Hampshire .....	532,853
New Jersey .....	2,128,139
New Mexico .....	2,148,374
New York .....	7,874,065
North Carolina .....	3,777,655
North Dakota .....	1,621,603
Ohio .....	5,372,866
Oklahoma .....	2,692,567
Oregon .....	2,058,265
Pennsylvania .....	4,528,909
Rhode Island .....	336,770
South Carolina .....	1,964,464
South Carolina .....	1,964,464
South Dakota .....	2,904,169
Tennessee .....	3,938,101
Texas .....	7,855,378
Utah .....	1,439,278
Vermont .....	748,818
Virginia .....	3,270,993
Washington .....	1,478,738
West Virginia .....	3,251,135



Wisconsin .....	3,735,374
Wyoming .....	1,133,277
Total .....	<u>\$139,773,986</u>

#### COUNTIES IN THE ENGINEERING DIVISION OF DEPARTMENT

The Division Engineer has charge of all activities in his respective Division. These include surveys, estimates and pencil plans, and the supervising of the construction of all projects, inspecting materials, making monthly estimates of all work, approving all bills and properly distributing same and directing the maintenance of work on the State Highways in his Division.

The five Divisions include the following counties respectively:

##### *Division No. 1—R. L. Bannerman, Division Engineer*

Jefferson	Washington
Leon	Bay
Wakulla	Holmes
Franklin	Walton
Liberty	Okaloosa
Gadsden	Santa Rosa
Jackson	Escambia
Calhoun	

##### *Division No. 2—L. K. Cannon, Division Engineer*

Madison	Baker
Taylor	Union
Hamilton	Bradford
Suwanee	Clay
Lafayette	Duval
Dixie	Nassau
Columbia	



*Division No. 3—H. C. Green, Division Engineer*

Brevard	Broward
St. Lucie	Union
Okeechobee	Monroe
Palm Beach	

*Division No. 4—Leon B. Thrasher, Division Engineer*

Alachua	Citrus
Putnam	Marion
Lake	Levy
Flagler	Sumter
Volusia	St. Johns

*Division No. 5—A. W. Kinney, Division Engineer*

Seminole	Glades
Orange	DeSoto
Oceola	Charlotte
Polk	Highlands
Pasco	Lee
Hillsboro	Pinellas
Manatee	Hernando
Hardee	Sarasota

SUMMARY OF PROJECTS COMPLETED AND  
UNDER WAY*Road No. 1—Alabama State Line to Jacksonville*

- Proj. No. 35—Length 5 miles, Federal Project approved but not advertised for bids. Will connect Pensacola with Pedido in Alabama.



- Proj. No. 38—Escambia River Bridge. Submitted to Federal Government but not yet approved. Plans now being prepared by State Road Department. This project will provide a year around crossing of the only stream not bridged between Pensacola and Jacksonville.
- Proj. No. 20—This is a bridge over the Choctawhatchee River and is now under construction as a Federal Project. This project includes approach fills to bridge which will contain approximately 150,000 cubic yards of embankment.
- Proj. No. 3—Victory bridge over Apalachicola River. This Federal Project is complete and is one of the largest reinforced concrete bridges in the South, being 2027 feet in length.
- Proj. No. 536—Quincy to Florence, Gadsden County. This project with Project 509, which is overhead crossing of G. F. & A. Ry., constitute a project  $5\frac{1}{2}$  miles in length which is now under construction.
- Proj. No. 6—Aucilla River to Greenville in Madison County. This project is completed and consists of 5.6 miles of excellent sand clay road on which Federal Aid was applied. This section of road was before improvement one of the worst in north Florida.
- Proj. No. 529—Suwannee River to Live Oak, 12.16 miles. This project is now under construction, approximately 11 miles of grading been completed. This project will be surfaced with sand clay.





Alligator Rock Creek Bridge, on Road No. 4, near Callahan.



Florida Rock Base Course, constructed by convict labor, on Federal Aid Project No. 32, Road No. 4, Nassau County.



- Proj. No. 38—Escambia River Bridge. Submitted to Federal Government but not yet approved. Plans now being prepared by State Road Department. This project will provide a year around crossing of the only stream not bridged between Pensacola and Jacksonville.
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Concrete Approach to Alapaha River Bridge. Under construction.



Bituminous Macadam Pavement, with Florida Rock base, under traffic for two years.



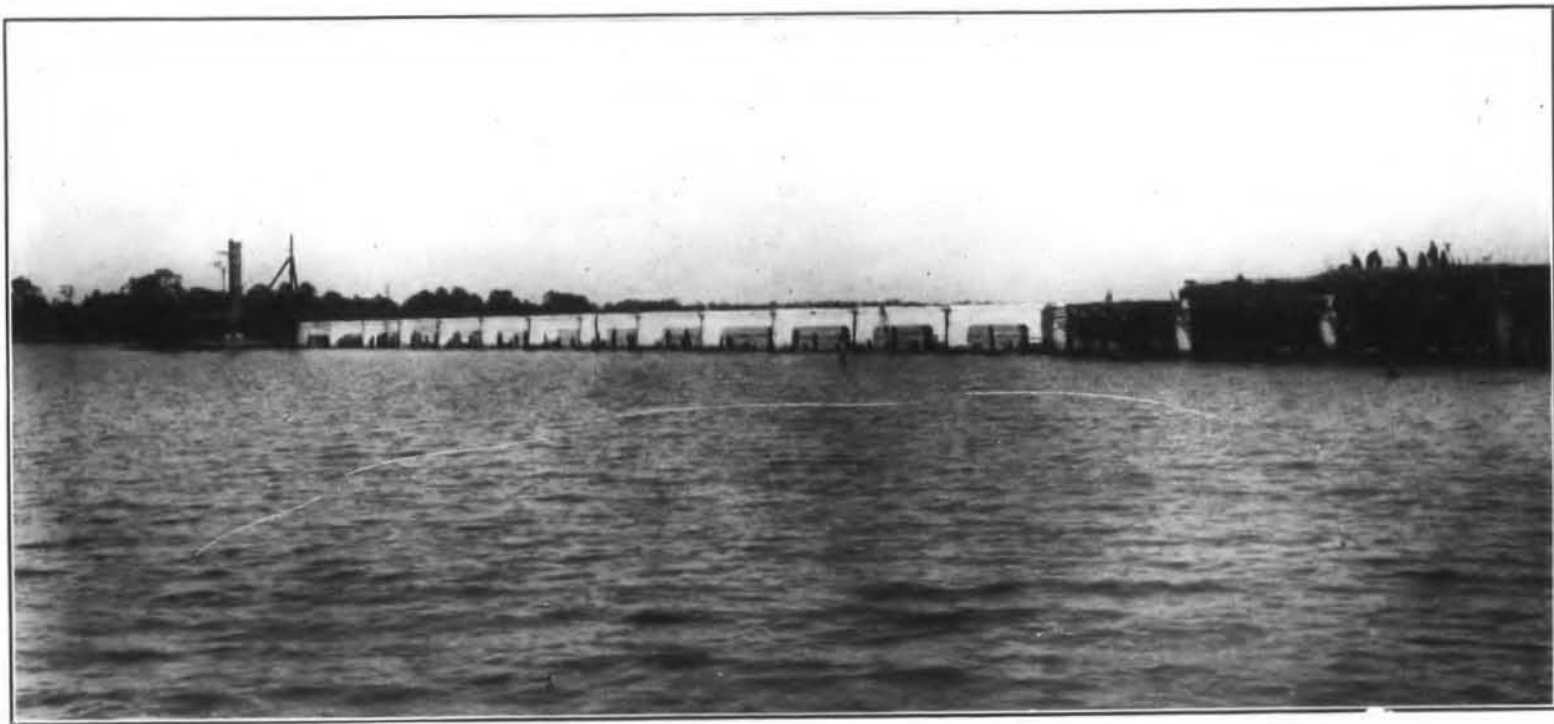


Surface-treated Rock Road in Levy County. This is a section of Road No. 5, which was built by the county, and surface-treated by State Road Department.



Steel Span over Alapaha river. Under construction.





Bridge over Safety Harbor, in Pinellas County. Now under construction.

2



- Proj. No. 533—Live Oak to Wellborn, Suwannee County, 13.57 miles in length. Grading on the project has been completed, and sand clay surface will shortly be constructed.
- Proj. No. 504—Wellborn to Lake City, Suwannee and Columbia Counties, 11.6 miles in length. Grading completed and temporary sand clay surface applied. Standard sand clay surface will be built during the coming year.
- Proj. No. 24—Lake City to Baker County Line, Columbia County, 9.89 miles in length. Bituminous macadam laid on crushed Florida rock base 16 feet wide. Completed as a Federal Aid Project.
- Proj. No. 11, 21, 22, 23—Baker County line to Jacksonville in Baker and Duval Counties, totaling 42.78 miles in length. These projects are under construction with Federal Aid. Cement concrete paving 16 feet in width is being laid and is about sixty per cent complete. This is one of the longest continuous concrete paving contracts ever let in the south.
- Proj. No. 21 B—This is a concrete bridge over the Little St. Mary's River 340 feet in length, about ninety per cent complete.

*Road No. 2—Georgia State Line to Fort Myers*

- Proj No. 7—Jasper to Jennings, Hamilton County, 12.94 miles. Completed as a Federal Aid Project with sand clay surface 20 feet in width.
- Proj. No. 7-B—Concrete and steel bridge over the Alapaha River, 477 feet in length. This is a



Federal Aid Project and practically completed.

- Proj. No. 31—Genoa to Jasper, Hamilton County, 11.81 Miles. This is a Federal Aid Project now under construction as a graded road. A temporary sand clay surface being built by the State is about 80% complete.
- Proj. No. 19—Genoa to Suwannee River at White Springs, 8.17 miles. This is a graded project with a temporary sand clay surface which is completed with exception of culvert and fill at White Springs, which is under construction. This is a Federal Aid project with the exception of sand clay.
- Proj. No. 30—Bridge across Suwannee River, Federal Aid Project, 322 feet in length. This bridge is now complete and being used. Is a concrete and steel structure. Was built as a memorial to Hon. Ed. Scott, first Chairman of Department and was dedicated November 18th, 1922.
- Proj. No. 26—Suwannee River to Lake City, Columbia County. This is a Federal Aid Project covering only grading and concrete drainage structures. A temporary sand clay surface has been built by the State which will later be replaced with some more durable type of paving.
- Proj. No. 27—Lake City South, 12.36 miles, Columbia County. This has been accepted as a Federal Aid Project, but plans are not yet approved. It will have an 18 foot surface, type to be determined after bids have been received on alternate types.
- Proj. No. 505—This project extends from the Southern end of Project 27 to the Alachua County line at the Santa Fe River and is 11.5



miles in length, approximately one-half of this project will be bituminous macadam and balance will be temporarily surfaced with sand clay. Work is now under way on both the sand clay and bituminous macadam surface. No Federal Aid will be used on this project.

Proj. No. 8—Santa Fe River to Burnett's Lake, 11.80 miles. Completed as asphalt macadam road, surface 16 feet wide. This is a Federal Aid Project.

Proj. No. 33—Burnett's Lake to Gainesville, 12.6 miles. This Federal Project is now under construction as an asphalt macadam road. Surface 16 feet wide. Approximately 90 per cent complete.

Proj. No. 37—Gainesville to Marion County Line, 14.4 miles. Plans for this project have been submitted but are not yet approved by Federal Government. This project crosses Paynes Prairie and reduces the distance between Gainesville and Micanopy 5 miles. Will probably be a bituminous macadam surface 18 feet wide.

Proj. No. 538—Alachua County Line to Reddick in Marion County. This project is to be graded and a base course of lime rock laid which will be maintained by surface treatment until a wearing surface can be constructed.

Proj. No. 520—Bellevue to Lake County Line, 15 miles. This project is now under construction. Rock base approximately 95% complete, which will be given a temporary surface treatment and later provided with a wearing surface of asphalt macadam.

Proj. No. 13—Mt. Dora to Plymouth, Orange County, 8.69 miles in length. This Federal Project



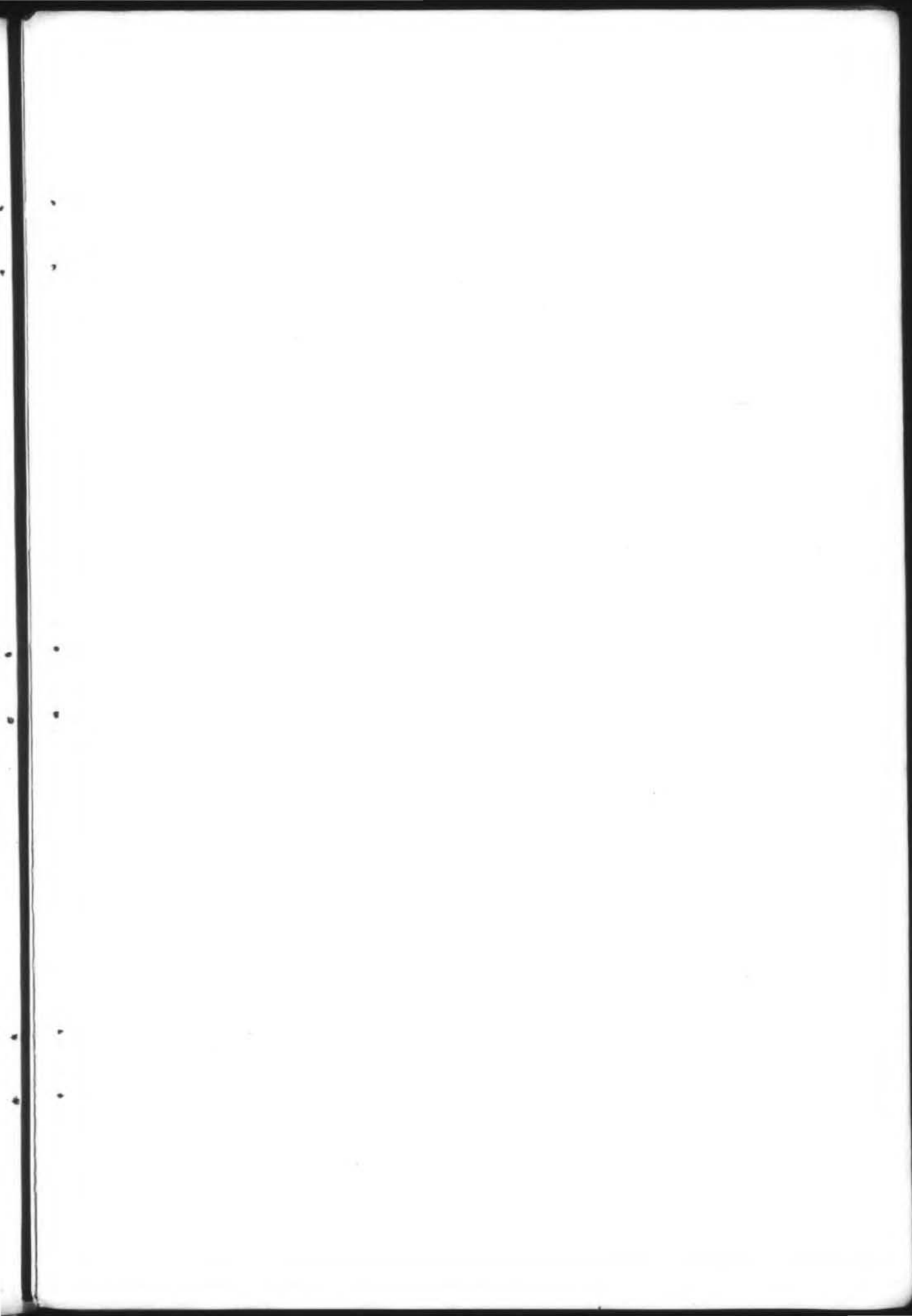
is practically complete with rock base and sheet asphalt top. This project closed the only gap in the hard surface on Road No. 2 in Lake and Orange Counties.

- Proj. No. 2—4.12 miles between Kissimmee and Polk County line has been completed as a nine foot brick road with lime rock shoulders three and one-half feet in width.
- Proj. No. 4 and 15—Arcadia to Carlstrom Field, 8.29 miles. These projects were completed as 9 foot concrete pravegment with crushed rock shouulders, (Federal Aid).
- Proj. No. 503—Bermont Road to Lee County Line, 15.8 miles. This project is now under construction as a graded road with local marl surface. This project will close out the impassable barrier between Arcadia and Ft. Myers on Road No. 2. The State has also participated in the paving between Buckingham and Ft. Myers.

*Road No. 3—Jacksonville to Orlando*

- Proj. No. 18—Cisco to Volusia CountyLine, 12.79 miles. This Federal Project is now under construction as an asphalt macadam surface laid on a rock base, the base being complete and the wearing surface under way.
- Proj. No. 532—Putnam County Line to DeLon Springs, 18.4 miles. This project is now under construction, a rock base being laid, which will later be given an asphalt macadam wearing surface. This project together with Project No. 18 will close the impassable gap between Jacksonville and DeLeon Springs. This work is being done with convict labor and State and county funds.



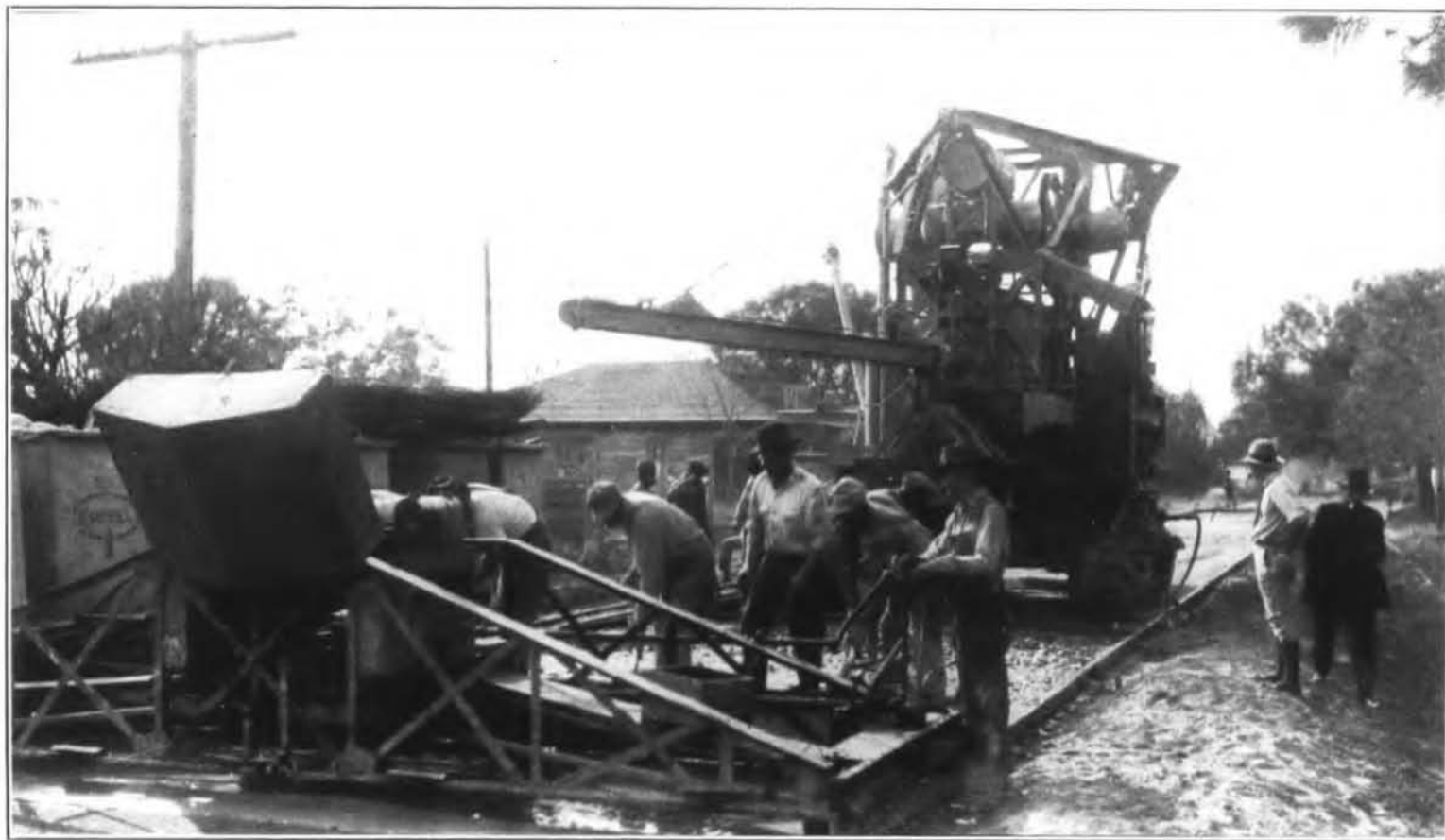






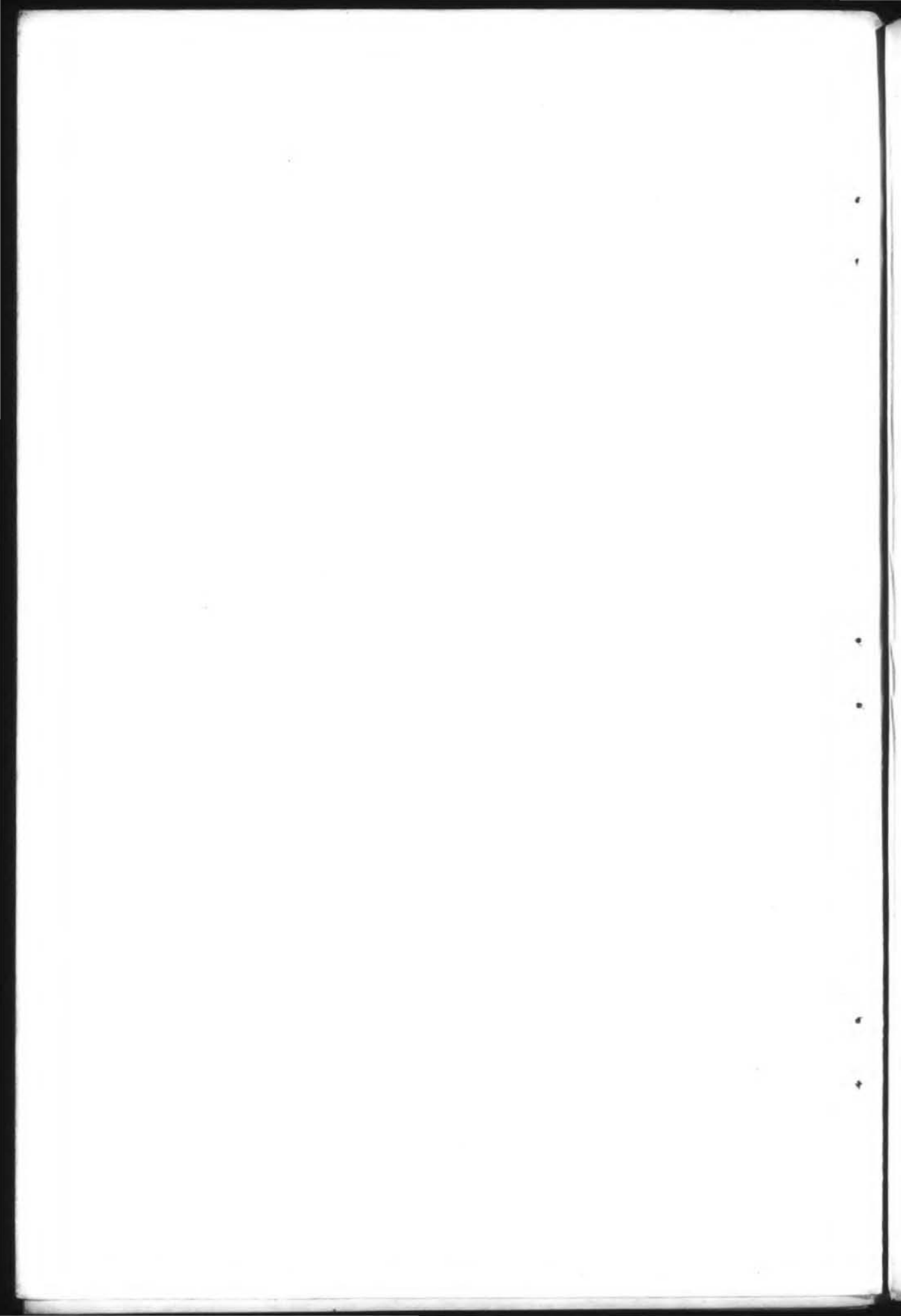
Stock yard on up-to-date Concrete Paving job, where approximately 30 carloads of material are being used daily. A part of one of the largest contractors' outfits ever operated in the South.





Concrete Paving Mixer and Finisher working on 16-foot Concrete Paving. This is one of two paving outfits employed on Projects 11, 21, 22 and 23, totaling 42 miles of continuous concrete paving.







Proj. No. 543—This project consists of the construction of rock shoulders to old brick road between Sanford and the Orange County line. The State is providing the rock which is being placed by Seminole County.

*Road No. 4—St. Mary's River to Miami*

Proj. No. 521—Georgia State Line at St. Mary's River to Hilliard, 13.8 miles in length. This project has been graded and a temporary sand clay surface constructed which will probably be replaced with a more durable type of surface in the near future.

Proj. No. 32—Hilliard to Duval County Line, Nassau County, 10 miles. This project is now under construction, the grading and drainage structures being completed. An asphalt macadam surface 18 feet wide, laid on rock base is now under construction. Convict labor is being used on this work.

Proj. No. 507—Bunnell to Volusia County Line, Flagler County, 14.4 miles. This project has been graded but no surface or drainage structures built. However it is expected that paving will be laid in 1923.

Proj's. 546, 554 and Fed. Proj No. 40—These three projects cover 54 miles of Road No. 4 in Brevard County. The two State projects are now under construction and two convict camps are employed on same. Federal Aid Project No. 40 has been approved by the Bureau of Public Roads; however, plans for same have not as yet been approved. County bond funds to the amount of \$300,000.00 are being contributed to these projects.



- Proj. No. 39—Sebastian River Bridge. This bridge has been submitted as a Federal Aid Project but plans have not yet been approved. It will be of concrete construction throughout.
- Proj. No. 36—Sebastian River to Vero, St. Lucie County, 15 miles in length, has been approved as a Federal Project and 7.76 miles let to contract and construction begun. The balance of the project will be advertised for bids at an early date.

*Road No. 5—High Springs to Fort Myers*

- Proj. No. 548—Alachua county line to Marion County Line, in Levy County. This is a lightly constructed lime rock road 12 feet in width which has been surface treated by the State Road Department. The road had been previously constructed by Levy County with county bond funds.
- Proj. No. 539—This project, 11.26 miles in length, lays between Romeo and Dunnellon on Road No. 5 in Marion County. The county is to grade and build the drainage structures and the State will provide the rock for surfacing which the county will apply.
- Proj. No. 544—Hernando County Line to Hillsborough County Line, Pasco County, 20 miles in length, being graded with convict labor. Later to be given asphalt macadam surface.
- Proj. No. 512—Riverview to the Manatee County Line. The grading and drainage structures on this project were built by the State Road Department. A paving of asphalt block was later laid by Hillsborough County.



- Proj. No. 29—Bullfrog Bridges No. 1 and No. 2 and Little Manatee River Bridge, Hillsborough County. These bridges are now under construction as Federal Aid Projects, completion having been delayed by reason of embargo on open top cars. These bridges constituting Projects 29 are located on State Project 512, referred to above but are being constructed under a separate contract.
- Proj. No. 17—Hillsborough County Line to Parrish, Manatee County, 7.87 miles. Rock base completed and asphalt macadam wearing surface is being applied. This work would have been completed had it not been suspended on account of open top car embargo.
- Proj. No. 519—From Project 17 to Palmetto, Manatee County, 9.5 miles. This project is now under construction, the old surface treated shell road being ditched and surface repaired. This with the preceeding four projects will provide an excellent road from Tampa to Bradentown and Sarasota. County funds have contributed toward this work.

*Road No. 6—Alabama State Line to Apalachicola via Marianna*

- Proj. No. 501, 502, and 560—From Jackson County Line to Port St. Joe, via Blountstown, in Calhoun County, 72 miles. Two convict camps are employed on the grading of these projects and surfacing with shell and sand clay. County funds are being used to pay 50 per cent of cost. Work is about 65 per cent complete.



*Road No. 7—Pensacola to Flomaton*

Proj. No. 34—Pensacola to Roberts, 10 miles, Escambia County. This is a Federal project. Contract has been awarded and work is being begun. Escambia County is meeting the Federal Aid with county bond funds. This project will be surfaced with a concrete pavement.

*Road No. 8—Haines City to Fort Pierce*

Proj. No. 523—Kissimmee River to St. Lucie County Line, Okeechobee County, 18 miles. This work is being done with county funds and consists of macadam road from the St. Lucie County Line to Okeechobee City and a graded road from that place to the Kissimmee River. This project is now complete.

*Road No. 105—Brooksville to St. Petersburg*

Proj. No. 524—Hudson to New Port Richey, Pasco County, 6 miles. This project has been completed on a waterbound macadam road, Pasco County bearing 50 per cent of the cost.

Proj. No. 526—Seminole Bridge is now under construction. This is a concrete structure 1560 feet in length, in Pinellas County.

*Road No. 107—Lake Annie to Sarasota via Arcadia*

Proj. No. 5 and No. 16—Concrete road completed 3.7 miles, also 4 miles of brick in DeSoto County. The concrete section was a Federal project.





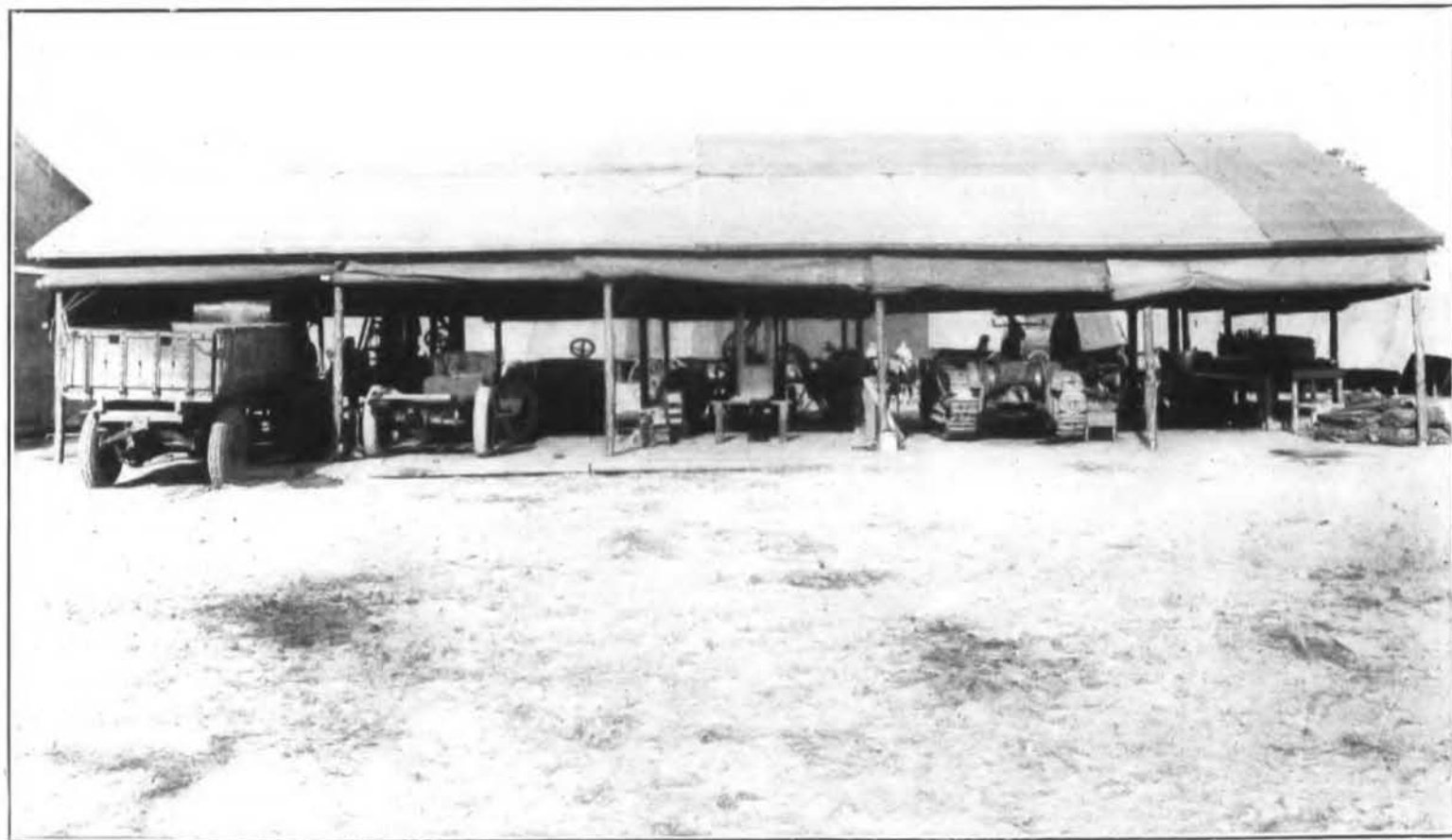
Concrete pavement on Project 23, Road No. 1, in Duval County.





Temporary storage at Gainesville Shop for surplus war material, and equipment awaiting overhauling.





Temporary Shop Building at Gainesville.





Model Convict Camp at Gainesville Shop.



*Road No. 109—Perry to Branford via Mayo*

Proj. No. 531—Fenholloway to Lafayette County line, in Taylor County, 8 miles in length. This consists of a grade across San Pedro Bay. This work was done with Taylor County convict force and State funds. Makes all year round road from Perry to Mayo.

Proj. No. 535—Taylor County Line to Mayo, Lafayette County, 8 miles. This project is a sand clay road built with county convict force and State funds.

*Road No. 110—Panama City to Marianna*

Proj. No. 500—Panama City to Jackson County Line, Bay County. This project was begun with county bond funds which were found insufficient to complete same and the State contributed a considerable amount of money to its completion in addition to providing engineering supervision.

Proj. No. 515—Bay County Line to Road No. 1, Jackson County, 15 miles. This project is under construction as a sand clay road and is now about 85 per cent complete.

*Road No. 124—From Road No. 2 at Belleview to Plant City*

Proj. No. 537—Belleview to Summerfield, Marion County, 6 miles in length. This project is being constructed with State auto funds and county convict force. Work but recently started.



*Road No. 125—Kissimmee to Melbourne*

Proj. No. 534—Melbourne to Osceola County Line, Brevard County, 14 miles. This project is now under construction and will include the widening and raising of fills across the St. Johns River flats. This road will form a part of the Federal 7 per cent system.

*Road No. 130—Tampa to Clearwater*

Proj. No. 527—Safety Harbor Bridge, Pinellas County.  
This is a concrete structure 1240 feet in length.

## SUMMARY TABLE NO. 1.

From the preceding table the following summary is derived which clearly sets forth the progress that has been made.

## Total Miles in Projects Completed and Under Way.

	Hard Surf.	Semi-Hard	Graded and Drained	Total
Dec. 31, 1922 .....	554.67	377.41	383.43	1,315.51
Dec. 31, 1920 .....	314.67	130.46	145.44	590.57
Miles undertaken 1921 and 1922...	240.00	246.95	237.99	724.94

Completed Miles  
December 31, 1922

Dec. 31, 1922 .....	250.54	180.24	293.59	724.37
Dec. 31, 1920 .....	69.16	74.94	268.81	412.91
Miles completed 1921 and 1922...	181.38	105.30	24.78	311.46

Total cost of all work to date.....	\$6,539,593.30
Total cost of all work to Dec. 31, 1920 .....	1,445,206.89
Total cost in 1921 and 1922 .....	\$5,094,386.41
Total cost of Bridges, 1921 and 1922 .....	1,041,749.00
Total cost of roads .....	\$4,052,637.41
Total Miles of All Types Constructed .....	811.46
Average Cost per Mile .....	\$ 13,011.74
Length of Bridges .....	7.011 Ft.



# PROJECTS UNDER CONSTRUCTION

October 1st, 1915-January 1st, 1923.

Proj.	From	To	County	Length Bridge Ft.	Type	Width		Name of Contractor	% Complete	Cost Per Mile	Cost of Bridges	Total to Jan. 1, 1921	Total in 1921 and 1922	Total to Jan. 1, 1923
						Grade	Surface							
1	Milligan	Holt	Okaloosa	10.45	Sand-C.	30	18	Barnes Const. Co.	100	8,250.03		33,901.45	61.39	33,962.84
3	Apalachicola River Bridge		Gadsden and Jackson	1002	Conc. Arch.	30	18	Masters & Mullen	100		510,814.44	191,695.54	319,118.90	510,814.44
6	Greenville	Aucilla River	Madison	5.6	Sand-C.	30	18	W. H. Thomas	100	7,944.85		36,214.51	8,276.69	44,491.20
9	Ponce de Leon	Argyle	Holmes	10.0	Sand-C.	30	18	State	100	5,313.74		49,699.74	3,437.70	53,137.44
11	Baldwin West	Sta. 948	Baker, Nas- sau, Duval	15.4	Concrete	30	16	Clayton-Mitchell	60	20,774.57	29,514.69	15,703.92	205,757.81	221,461.73
14A-B	Blackwater River Bridge		Santa Rosa	370	Steel	20	20	Inglis-Lytle	100		167,930.26	147,426.64	155,911.08	303,337.72
20	Choctawhatchee River Bridge		Holmes and Washington	480	Steel	30	18	Sou. Clay Mfg. Co.	100	21,425.23				
						30	20	Pensacola Ship Bldg.	30		49,765.90	72.90	135,485.25	135,558.15
21A	Glenn St. Marys East	to Sta. 65	Baker	5.68	Concrete	30	20	Inglis-Lytle	70	23,250.40	5,167.84	16,812.73	80,798.71	97,611.44
21B	Little St. Mary's River Bridge		Baker	340	Rein. Conc.	30	20	Pensacola Ship Bldg.	90		32,144.29		32,144.29	32,144.29
22	Columbia Co. Line	Project 11	Baker	8.9	Concrete	30	16	Inglis-Lytle	10	45,391.97		15,417.81	24,981.04	40,398.8
23	East of Jax Brick	Baldwin	Duval	12.8	Concrete	30	16	Clayton-Mitchell	100	27,181.28	14,431.90	17,365.83	344,986.53	362,352.36
24	Lake City	Baker Co. Line	Columbia	9.89	Bit. Mac.	30	16	Inglis-Lytle	100					
35	Pensacola	Nunez Ferry	Escambia	5.0	Concrete	30	18	J. Y. Wilson	100	25,481.45		25,288.70	226,783.00	252,011.70
38	Escambia Bay Bridge		Escambia	3.40	Rein. Conc.	30	18						8,383.98	8,383.98
			Santa Rosa			30	20							
504	Lake City	Wellborn	Columbia	9.2	G. & D.	30	20		40	5,856.11			21,550.48	21,550.48
508	East Approach Project No. 3		Gadsden	850	Rein. Conc.	20	20	A. Bentley & Sons	100		82,374.62		82,374.62	82,374.62
509	Overhead Crossing at Florence		Gadsden	0.7	Wood	20	20	M. W. Meggs	100	2,660.31	2,925.02		4,787.24	4,787.24
514	Apalachicola River	Marianna	Jackson	25.0	Sand-C.	30	18	State	90	683.14			15,370.59	15,370.59
516	West Approach Project No. 3		Jackson	175	Rein. Conc.	20	20	A. Bentley & Sons	100		27,413.12		27,413.12	27,413.12
517	Lloyd Bridge		Jefferson	200	Wood	20	20	W. P. Kennedy	100		4,564.13		4,564.13	4,564.13
529	Live Oak	Suwannee River	Suwannee	12.16	Sand-C.	30	18	State	70	1,622.40			19,728.44	19,728.44
533	Columbia County Line	Live Oak	Suwannee	13.57	Sand-C.	30	18	State	60	2,532.49			34,365.89	34,365.89
536	Florence	Quincy	Gadsden	5.5	Sand-C.	30	18	County	100	646.59			3,556.24	3,556.24
549	Nunez Ferry	Ferry Pass	Escambia										1,571.33	1,571.33
557	East Approach Project No. 3		Gadsden	0.6	Sand-C.	30	18	County	100	3,500.00			2,100.00	2,100.00
560	Canal	Wewahitchka	Calhoun	20.0	Sand-C.	30	18	State	100	624.29			12,485.77	12,485.77
565	Suwannee River	Madison	Madison	17.0	G. & D.	30	30						670.53	670.53
567	Argyle	Crestview	Walton		Surveys only								2,634.83	2,634.83
571	Madison	Greenville	Madison		Surveys only								314.18	314.18
2	Kissimmee	Laughman	Osceola	4.12	Asph. Block	30	18	Alabama Pav. Co.	100	30,508.23		120,096.48	5,597.42	125,693.90
4	Arcadia	Sta. 162	DeSoto	3.03	Concrete	30	18	Luten Bridge Co.	100	30,533.36		72,620.30	19,956.39	92,576.69
7A	Jasper	Jennings	Hamilton	12.94	Sand-C.	30	18	Logan Bros.	90	8,218.36		22,976.93	72,766.94	95,743.87
7B	Alapaha River Bridge		Hamilton		Rein. Conc.	30	18	State	80		102,175.96		102,175.96	102,175.96
8	Columbia County Line	Burnett's Lake	Alachua	11.675	Bit. Mac.	30	16	Pensacola Ship Bldg.	100	21,529.72		113,278.61	138,080.81	251,359.42
13	Plymouth	Mt. Dora	Orange	8.59	Sheet Asphalt	30	16	Finley Method Co.	90	36,019.60		5,118.19	273,313.22	278,431.41
15	Arcadia	Carlstrom Field	DeSoto	3.26	Concrete	30	16	W. P. McDonald	100	21,581.64		57,027.70	18,328.43	70,356.13
19A	Suwannee	Genoa	Hamilton	8.17	G. & D.	30	30	Logan Bros.	90	6,604.48		26,089.83	22,453.10	48,542.93
19B	Swift Creek and Gulley Bridges		Hamilton	106	Rein. Conc.	20	20	State	50		13,524.94		13,524.94	13,524.94
26	Lake City	Suwannee River	Columbia	11,009	Sand-C.	30	18	Luten Bridge Co.	80	7,585.79		21,811.31	49,191.64	71,002.95
27	Lake City	South	Columbia	12.36	Concrete	30	18	Clayton-Mitchell					309.24	309.24
30	Suwannee River Bridge		Columbia	322	Rein. Conc.	20	20	Pensacola Ship Bldg.	100		61,241.35	377.76	60,863.59	61,241.35
31	Genoa	Jasper	Hamilton	11.81	G. & D.	30	30	State	70	6,376.80		11.67	52,724.44	52,736.11
33A	Burnett's Lake	Gainesville	Alachua	12.6	Bit. Mac.	30	16	Luten Bridge Co.	90	27,038.22		14,549.90	292,063.52	306,613.42
37	Gainesville	Marion	Alachua	14.432	Bit. Mac.	30	18	Barber-Fortin	90				2,314.42	2,314.42
503	DeSoto Co. Line	Lee Co. Line	Charlotte	15.8	G. & D.	30	30	County	90	5,541.89		38,751.37	40,054.29	78,805.66
505	Proect 27	Alachua Co. Line	Columbia	11.8	G. & D.	30	30	State	60	5,581.98		14,433.54	51,433.76	65,867.30
520	Bellevue	Lake Co. Line	Marion	15.53	Bit. Mac.	30	18	Barber-Fortin	40	30,512.00		189,479.51	189,479.51	189,479.51
538	Alachua Co. Line	Reddick	Marion	10.9	Bit. Mac.	30	18	State	10	24,075.73		12,665.70	14,230.84	26,896.54
541	Reddick	Ocala	Marion	10.42	Bit. Mac.	30	18	State					262.65	262.65
542	Bowling Green	Wauchula	Hardee	6.0	Sand-C.	30	18	State					416.95	416.95
550		Lake	Lake		G. & D.	30	18						66.13	66.13
553	Ocala	Bellevue	Marion	8.0	Bit. Mac.	30	18	State					673.07	673.07
563	Projects No. 2	Polk Co. Line	Osceola	5.0	Asphalt Block	30	18		100					
573	Orlando	Osceola Co. Line	Orange	14.0	Brick	30	18		100				980.34	980.34
18	Sisco	Volusia Co. Line	Putnam	12.79	Bit. Mac.	30	16	Fla. Eng. Co.	90	19,412				



BRIDGES COMPLETED 1921-1922.

Name of Bridge	Road No.	Proj. No.	Length Feet	Width Feet	Type	Cost 1921-1922	Total Cost
Victory .....	1	3	2627	18	Conc. Arch .....	428,906.64	620,602.18
Alapaha River .....	2	7B*	477	20	Steel and Conc. ....	102,175.96	102,175.96
Blackwater River .....	1	14B	370	18	Steel and Conc. ....	155,911.08	167,930.26
Swift Creek .....	2	19B	106	20	Conc. D. G. ....	13,524.94	13,524.94
Little St. Mary's .....	1	21B*	340	20	Conc. Arch .....	32,144.29	32,144.29
Bull Frog No. 1 .....	5	29A*	106	20	Conc. D. G. ....	27,257.14	64,192.95
Bull Frog No. 2 .....	5	29A*	210	20	Conc. D. G. ....	36,935.81	
Little Manatee River ....	2	29B*	215	20	Conc. Arch .....	48,067.80	48,405.37
Suwannee River .....	2	30	325	20	Steel and Conc. ....	60,863.59	61,241.35
Alligator Creek .....	4	32	135	20	Conc. D. G. ....	37,823.92	37,823.92
Seminole .....	105	526 *	1550	20	Conc. D. G. ....	32,123.39	32,123.39
Safety Harbor .....	130	527 *	1150	20	Conc. D. G. ....	66,014.44	66,014.44
Total .....			7611			\$1,041,749.00	\$1,246,179.05

Note: Bridges marked \* are still under construction.  
All bridges shown above are included in Table No. 1.



## STATE CONVICT CAMPS.

Camp No.	County	Average No. of Prisoners	Total Time Days	Total Time On Road	Time On Yard Holidays, etc.	Cost of Camp
1	Calhoun	46.2	32,736	21,985.5	10,750.5	\$ 24,716.17
2	Brevard	43.5	30,268	20,351.5	9,916.5	27,089.51
3	Holmes	41.3	28,773	18,250.6	10,522.4	27,418.50
4	Charlotte	29.6	21,031.3	14,331.2	6,640.1	23,325.86
5	Suwannee	43.7	29,389.1	22,512.8	6,876.3	24,246.21
6	Suwannee	56.1	38,620	29,569.1	9,050.9	30,098.02
7	Shop, Gainesvill	34.3	10,439	7,830.1	2,608.9	11,960.77
8	Hamilton	63.0	44,247	31,699.8	12,574.2	29,519.57
9	Columbia	30.5	22,432.5	15,028.7	7,403.8	20,279.62
10*	.....	41.4	9,765	7,601.7	2,163.3	12,455.56
11	Duval	12.0	1,032	744	288	1,451.23
12	Hamilton	45.3	30,490	21,641.3	8,848.7	26,778.70
13	Nassau	59.4	26,598	18,472.3	8,125.7	16,394.82
14*	.....	37.4	11,980	7,556.5	4,423.5	13,032.35
15	Marion	60.5	42,104.5	32,211.9	9,892.6	25,329.77
16	Volusia	39.4	14,449.5	8,306.5	6,143.0	15,015.08
17	Columbia	44.4	16,465.0	11,252.5	5,212.5	12,859.14
18	Manatee	31.6	21,865.5	15,192.4	6,673.1	21,469.42
19	Brevard	34.3	24,384.0	17,343.5	7,040.5	21,589.46
20*	.....	.....	.....	.....	.....	218.18
21*	.....	.....	.....	.....	.....	33.30
22	Jackson	37.8	26,456.9	19,368.5	7,088.4	21,967.68
23	Pineola Quarry	27.3	18,502	14,081.4	4,420.6	18,041.16
24*	.....	36.1	18,246.0	12,829.1	5,416.9	18,820.42
25*	.....	14.0	878.0	638.4	239.6	1,616.58
26	Calhoun	38.9	27,269.0	20,340.6	6,928.4	21,345.94
27	Pasco	52.6	33,059.0	23,376.8	9,682.2	26,890.52
28	Alachua	32.3	14,940.0	10,853.9	4,086.1	11,826.97
29	Brevard	47.4	9,704.0	6,585.3	3,118.7	6,876.66
Total		1,079.9	606,124.3	430,015.9	176,108.4	\$512,667.17

Note: Camps marked \* have been discontinued and prisoners assigned to other camps.



## ACCOUNTING DEPARTMENT

## PERSONNEL

S. L. Walters .....	Auditor
Bettie Herring .....	Bookkeeper
J. M. Harris .....	Bookkeeper
C. L. Camp .....	Ass't. Bookkeeper
J. H. Wentworth .....	Voucher Clerk
Pauline Kelly .....	Stenographer
Jewell Smith .....	Typist

All accounts covering administration, salaries and expenses, supplies, construction and maintenance work, are carefully audited by this department. When audited, accounts are arranged on vouchers and submitted to Chairman and State Highway Engineer for approval. After their approval, vouchers are submitted to Comptroller for warrants. After warrants are written, they are mailed from this department to the various creditors. An individual record is kept showing date accounts are received in this department; also number of warrant and date mailed.

Since last Biennial Report, our disbursements have increased from an average of \$150,000.00 to \$300,000.00 monthly. During period of this report, in order to arrange a modern system of accounts, we are restating all accounts incurred since the State Road Department commenced to function, which was October 1915. To do this has entailed quite a volume of additional work. We expect to complete this work about June 1st, 1923, and when completed, we will have such records as will compare with other States. Our records will not only show monthly expenditures in each county by roads, projects, etc., but will show total expenditures on such roads and projects since beginning of the work.

Our record of receipts and disbursements by funds are balanced at the end of each month, with records of Treas-



urer and Comptroller. Our entire accounts are checked at the end of each year by State Auditor. In this connection will state that the system of accounts which we are inaugurating, and which are outlined in this report, have the full approval of the State Auditor, J. W. Stevens, who has just completed audit of our accounts for year 1922.

Necessary records are also kept in this department covering personnel of prisoners in each camp; transfers from and to Raiford, discharges, escapes, captures, etc. Provisions and supplies incident to operation of camps are purchased by the Auditor—such purchases, of course, being approved by the Chairman.

Stationery and other office supplies for the entire department are purchased by, or with the approval of, the Auditor. A stock of stationery is carried and issued on requisition from the several divisions.

Accounts of the Equipment Division at Gainesville, are under the direction of the Auditor. Monthly reports are rendered by Superintendent of Equipment, which are checked against records in Auditor's office.

Monthly reports are prepared in this department for the benefit of the Chairman and members of the board. Such reports cover detailed data as to receipts and disbursements, as well as classification and allocation of expenditures.

A forty-four week is observed. However, due to the volumn of work handled, we find it necessary to render a considerable number of hours overtime. This overtime, however, is given freely by the several employees, who are employed on a monthly salary, and duties assigned, are being handled in a most satisfactory manner.



## FINANCIAL STATEMENT

Balance brought forward Dec. 31, 1921.....\$ 445,680.49

## Receipts for the year 1921:

15% Auto—Administration		
Fund .....	\$ 101,133.40	
85% Auto—County Road		
Fund .....	570,401.51	
State Road Tax .....	643,373.16	
From Federal Government.	490,308.38	
Gasoline Inspection Fund..	55,824.74	
Gasoline—1c Gallon Tax		
Fund .....	228,056.41	
From Counties .....	111,708.76	\$2,200,806.36

## Receipts for the year 1922:

5% Auto—Administration		
Fund .....	\$ 71,623.51	
70% Auto—State Federal		
Aid .....	1,002,729.20	
State Road Tax .....	396,206.19	
From Federal Government.	842,965.84	
Gasoline Inspection Fund..	80,803.14	
Gasoline—1c Gallon Tax...	601,336.71	
From Counties, etc. ....	580,716.92	\$3,576,381.51
Total .....		\$6,222,868.36

*Disbursements*

## Administrative and General

Office Expenses .....	\$ 62,612.05
Engineering Expenses .....	383,696.52
Construction and Maintenance	
of Roads and Bridges.....	4,207,330.83



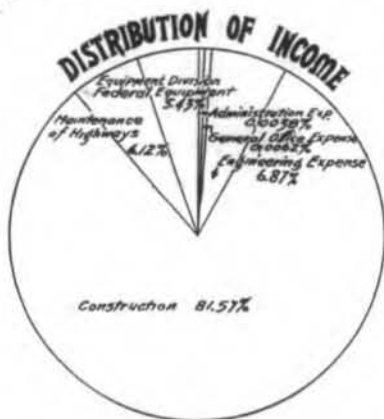
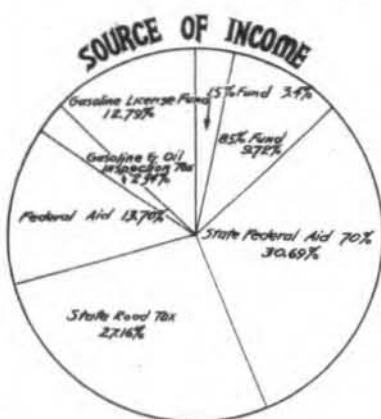




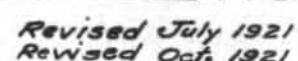
Equipment Division .....	321,044.86	
State Road Convicts .....	512,667.17	\$5,487.351.43
Balance to January 1, 1923		\$ 735,516.93

## STATE ROAD DEPARTMENT of FLORIDA.

CHART SHOWING SOURCE & DISTRIBUTION OF INCOME  
TO DECEMBER 31, 1922.







State Road #1	From the Alabama State Line at Honey Ferry to Jacksonville via Pensacola, Milton, Crestview, DeFuniak Springs, Bonifay, Chapley, Marianna, Chattahoochee, Quincy, Havana, Tallahassee, Marietta, Greenville, Madison, Live Oak, Lake City, Sanderson, Moccasin and Baldwin.
State Road #2	From the Georgia State Line north of Jennings to Fort Myers, via Jasper, White Springs, Lake City, High Springs, Gainesville, Ocala, Leesburg, Edinburg, Ft. Dora, Plymouth, Orlando, Kissimmee, Havana City, Bortom, Arrowhead and Opa Lodge.
State Road #3	From Jacksonville to Orlando via Orange Park, Green Cove Springs, Palatka, East Palatka, Crescent City, Deland, and Sanford.
State Road #4	From the Georgia State Line south of Falfallen, Ga. to Key West via Hilliard, Callahan, Jacksonville, St. Augustine, Dunnell, Daytona, Titusville, Port Pierce, West Palm Beach, Fort Lauderdale, Miami and Keyal Palm Shute Park.
State Road #5	From High Springs to Pella Gordo via Newberry, Archer, Williston, Dunnellon, Inverness, Brooksville, Lutz, Tampa, St. Petersburg, Bradenton, Sarasota, Venice and Englewood.
State Road #6	From the Alabama State Line south of Dothan, Ala. to Apalachicola via Compiton, Marianna, Altha, Blountstown, Scotts Ferry, Wewahatcha and Port St. Joe.
State Road #7	From the Alabama State Line at Flemish to intersection of State Road #1, near Pensacola.
State Road #8	From Gaines City to Ft. Pierce via Lake Wales, Frost Proof, Hunk, Lake Annie and Okechobee City.
State Road #9	From Madison to Georgia State Line, toward Quilman, Ga.

- 101 From Jacksonville to Fernandez via Yule.
- 102 From Baldwin to Branson via Lawley, Shalton and Gainesville.
- 103 From St Augustine to East Palatka via Hastings.
- 104 From Hastings to Burnell.
- 105 From Brooksville to St Petersburg via Arripka, New Port Richey, Tarpon Springs, Clearwater and Largo.
- 106 From Haines City to State Road # 5. East of Tampa, via Lakeland and Plant City.
- 107 From Lake Annie to Sarasota via Arcadia.
- 108 From State Road # 1. East of Tallahassee to Palatka via Lamont, Simons, Perry, Old Town, Teahon, Hawthberry, Gainesville and Hawthorne.
- 109 From Perry to High Springs via Mayo and Bronford.
- 110 From Panama City to Marianna.
- 111 From Quincy to Hosford.
- 112 From State Road # 1. at Perry Pass to State Road # 17.
- 113 From Milton to State Line south of Brewton, Alabama.
- 114 From Chipley to Vernon.
- 115 From Bristol to Tallahassee via Telogia and Hosford.
- 116 From State Line on Thomasville Road to Crawfordville via Tallahassee.
- 117 From Monticello to State Line on Thomasville Road.
- 118 From State Line to Simons via Greenville.
- 119 From Daytona to DeLand.
- 120 From New Smyrna to Melbourne via Sanford.
- 121 From Orlando to Indian River City via Christmas.
- 122 From Leesburg to State Road # 2 via Tavares.
- 123 From Leesburg to State Road # 2. near Winter Haven via Groveland and Auburndale.
- 124 From State Road # 2. near Ballerier to Plant City via Bushnell and Dade City.
- 125 From Kissimmee to Melbourne via St Cloud and Deer Park.
- 126 From Lake Annie to State Aid Road # 127 at or near Moore Haven.
- 127 From West Palm Beach to Olga Bridge to connect with State Road # 2. via south side of Lake Okechobee.
- 128 From Miami along the Tamiami Trail via Marco and Naples to Fort Myers.
- 129 From Key West to Stock Island.
- 130 From Tampa to Clearwater via Oldsmar and Safety Harbor.
- 131 From Jasper to Buford via Suwanee Springs and Live Oak.
- 132 From Eustis via Alator to connect with Road # 3.
- 133 From Bartow to Dade City via Lakeland.
- 134 From Lakeland N.E. to connect with Road # 125.
- 135 From Hicks to Wildes Landing.
- 136 From Tallahassee to Quincy via Midway.
- 137 From Havana, N.Y. to Georgia State Line.

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